HITACHI

Inspire the Next

DVD RECORDER (DVD RECORDER with VIDEO CASSETTE RECORDER)

Instruction Manual

Model No. **DV-RF7U**

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HITACHI AMERICA, LTD.
HOME ELECTRONICS DIVISION
900 Hitachi Way
Chula Vista, CA 91914-3556
Service Hotline: 1-800-HITACHI

HITACHI CANADA, LTD.
DIGITAL MEDIA DIVISION
2495 Meadowpine Blvd., Mississauga,
Ontario L5N 6C3 CANADA
Service Direct: 1-800-HITACHI
(1-800-448-2244)

Region number supported by this unit

Region numbers are allocated to DVD players and software according to where they are sold.

- The region number of this unit is "**1**".
- The unit will play DVDs marked with labels containing "**1**" or "**ALL**".

Example:

Dear customer

Thank you for purchasing this product. For optimum performance and safety, please read these instructions carefully.

Before connecting, operating or adjusting this product, please read these instructions completely. Please keep this manual for future reference.

Para la instalación y las operaciones básicas del aparato, existe una guía en español.

Warning

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

LASER SAFETY

This unit employs a laser. Only a qualified service person should remove the cover or attempt to service this device, due to possible eye injury.

CAUTION: USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

CAUTION: VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCK DEFEATED. DO NOT STARE INTO BEAM.

LOCATION: INSIDE, NEAR THE DECK MECHANISM.

FCC WARNING- This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

RADIO-TV INTERFERENCE
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1) Reorient or relocate the receiving antenna.
2) Increase the separation between the equipment and receiver.
3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4) Consult the dealer or an experienced radio/TV technician for help.

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION: POUR ÉVITER LES CHOC ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

IMPORTANT SAFEGUARDS

1. Read Instructions - All the safety and operating instructions should be read before the appliance is operated.
2. Retain Instructions- The safety and operating instructions should be retained for future reference.
3. Heed Warnings - All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow Instructions - All operating and use instructions should be followed.
5. Cleaning - Unplug this video product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning. EXCEPTION: A product that is meant for uninterrupted service and, that for some specific reason, such as the possibility of the loss of an authorization code for a CATV converter, is not intended to be unplugged by the user for cleaning or any other purpose, may exclude the reference to unplugging the appliance in the cleaning description otherwise required in item 5.
6. Attachments - Do not use attachments not recommended by the video product manufacturer as they may cause hazards.
7. Water and Moisture- Do not use this video product near water, for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like.
8. Accessories - Do not place this video product on an unstable cart, stand, tripod, bracket, or table. The video product may fall, causing serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the video product. Any mounting of the appliance should follow the manufacturer's instructions and should use a mounting accessory recommended by the manufacturer. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

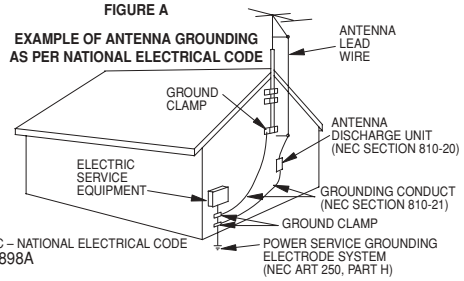
   PORTABLE CART WARNING
   Symbol provided by RETAC)

   S3125A

   AMEUBLES- Cet appareil ne doit être placé que sur unmeuble (avec ou sans roulettes) recommandé par le fabricant. Si vous l'installez sur un meuble à roulettes, déplacez les deux ensembles avec précaution. Un arrêt brusque, l'utilisation d'une force excessive et des surfaces irrégulières risquent de déstabiliser l'ensemble et de le renverser.
9. Ventilation - Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the video product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the video product on a bed, sofa, rug, or other similar surface. This video product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
10. Power Sources - This video product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.
11. Grounding or Polarization - This video product is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
12. Power Cord Protection - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
13. Outdoor Antenna Grounding - If an outside antenna or cable system is connected to the video product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges.
    Article 810 of the National Electrical Code, ANSI/NFPA No. 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. (Fig. A)

    FIGURE A

    EXAMPLE OF ANTENNA GROUNDING AS PER NATIONAL ELECTRICAL CODE

    
    ANTENNA LEAD WIRE
GROUND CLAMP
ANTENNA DISCHARGE UNIT (NEC SECTION 810-20)
ELECTRIC SERVICE EQUIPMENT
GROUNDING CONDUCT (NEC SECTION 810-21)
GROUND CLAMP
NEC – NATIONAL ELECTRICAL CODE
S2898A
POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250, PART H)
14. Lightning - For added protection for this video product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the video product due to lightning and power-line surges.
15. Power Lines - An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
16. Overloading - Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.
17. Object and Liquid Entry - Never push objects of any kind into this video product through any openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the video product.
18. Servicing - Do not attempt to service this video product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
19. Damage Requiring Service - Unplug this video product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
    a. When the power-supply cord or plug is damaged.
    b. If liquid has been spilled, or objects have fallen into the video product.
    c. If the video product has been exposed to rain or water.
    d. If the video product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the video product to its normal operation.
    e. If the video product has been dropped or damaged in any way.
    f. When the video product exhibits a distinct change in performance, this indicates a need for service.
20. Replacement Parts - When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.
21. Safety Check - Upon completion of any service or repairs to this video product, ask the service technician to perform safety checks to determine that the video product is in proper operating condition.
22. Heat - This video product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

Precaution

Handling Cautions

- Before connecting other components to this recorder, be sure to turn them all off.
- Do not move the recorder while a disc is being played, or the disc may be scratched or broken, and the recorder's internal parts may be damaged.
- Do not put a flower vase filled with water or any small metal objects on the recorder.
- Be careful not to put your hand into the disc tray.
- Do not place anything other than the disc in the disc tray.
- Exterior interference such as lightning and static electricity can affect normal operation of this recorder. If this occurs, turn the recorder off and on again with the POWER button, or disconnect and then reconnect the AC power cord to AC power outlet. The recorder will operate normally.
- Be sure to remove the disc and turn off the recorder after use.
- Disconnect the AC power cord from AC outlet when you don't intend to use the recorder for long periods of time.
- Clean the disc by wiping in a straight line from the inside to the outside of the disc.

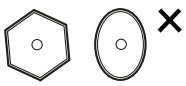
Maintenance of Cabinet

For safety reasons, be sure to disconnect the AC power cord from AC outlet.

- Do not use benzene, thinner, or other solvents for cleaning.
- Wipe the cabinet with a soft cloth.

Disc Handling

- Use discs with regular shapes. If an irregular disc (a disc with a special shape) is used, this DVD Recorder-VCR may be damaged.



Holding discs

- Avoid touching the surface of a disc where recording is performed.

Cartridge

- This is used to prevent damage by dirt, scratches, etc. when using a DVD-RAM disc.

DVD-RAM, DVD-RW and DVD-R

- Clean with DVD-RAM/PD disc cleaner (generally available). Do not use cleaners or cloths for CDs to clean DVD-RAM/DVD-RW/DVD-R discs.

DVD-Video, CD

- Wipe off dirt or contamination on the disc with a soft cloth.

Cautions on handling discs

- Do not write on the printed side with a ball-point pen or pencil.
- Do not use record cleaning sprays or antistatic. Also, do not use volatile chemicals, such as benzene or thinner.
- Do not apply labels or stickers to discs. (Do not use discs fixed with exposed tape adhesive or leftover peeled-off stickers.)
- Do not use scratch-proof protectors or covers.
- Do not use discs printed with label printers available on the market.
- Do not load warped or cracked discs.

Disc Storage

Be careful not to harm the disc because the data on these discs is highly vulnerable to the environment.

- Do not keep under direct sunlight.
- Keep in a cool ventilated area.
- Store vertically.
- Keep in a clean protection jacket.
- If you move your DVD Recorder-VCR suddenly from a cold place to a warm place, condensation may generate on the operating parts and lens and cause abnormal disc playback. If this occurs, remove the disc and wait for one to two hours with the power on before attempting playback.

Disc Specifications

DVD-Video

- A digital versatile disc (DVD) can contain up to 135-minutes of images, 8-language audio and 32 subtitle languages. It is equipped with MPEG-2 picture compression and Dolby 3D surround, allowing you to enjoy vivid and clear theater quality images in the comfort of your own home.
- When switching from the first layer to the second layer of a double-layered DVD Video disc, there may be momentary distortion in the image and sound. This is not a malfunction of the unit.
- Once a DVD-R/RW recorded in Video Mode is finalized, it becomes DVD-Video.

Audio CD

- An audio disc on which 44.1kHz PCM Audio is recorded.
- Plays CD-DA format audio CD-R and CD-RW discs. This unit may not be able to play some CD-R or CD-RW discs due to the condition of the recording.

CD-R/RW

MP3 CD-R/RW

- Only CD-R discs with MP3 files recorded with ISO9660 or JOLIET format can be played back.
- Only MP3 files with the "mp3", and "MP3" extension can be used.
- For MP3 files recorded with a VBR (Variable Bit Rates), from 32 kbps to 320 kbps, the sound may cut in and out.
- Playable bit rate range is from 56 kbps to 320 kbps.
- The unit can handle a maximum of 1000 files and folders.

JPEG CD-R/RW

- Only JPEG files with the ".jpg", ".JPG" extension can be used.
- The unit can handle a maximum of 1000 files and folders.
- Maximum size of progressive JPEG is 3M pixels.
- MOTION JPEG is not supported.

Using CD-R/RW

- If the CD-R/RW disc was not recorded as a closed session, you may experience a delay in the early playback time, and all recorded files may not play.
- Some CD-R/RW discs may not be playable with this unit, depending on the device which was used to burn them. For contents recorded on CD-R/RW media from CDs for your personal use, playability may vary depending on contents and discs.

DVD-R Disc Playback and Recording

- Once a DVD-R/RW recorded in Video Mode is finalized, it becomes DVD-Video.
- You can record onto the available space on the disc and perform editing functions such as giving titles to discs and programs and erasing programs before finalizing.
- When programming is erased from a DVD-R, that space does not become available. Once an area on a DVD-R is recorded on, that area is no longer available for recording, whether the recording is erased or not.
- It takes about 30 seconds for the unit to complete recording management information after recording finishes.
- This product optimizes the DVD-R for each recording. Optimizing is carried out when you start recording after inserting the disc or turn on the unit. Recording onto the disc may become impossible if optimizing is carried out too many times.
- Playback may be impossible in some cases due to the recording condition.
- This unit can play back DVD-R discs recorded and finalized with a DVD video recorder. It may not be able to play some DVD-R discs depending on the disc and the recording condition.

DVD-RW Disc Playback and Recording

- Recording and playback can be performed on DVD-RW discs in both Video and VR Modes.
- Once a DVD-RW recorded in VR Mode is finalized, you cannot perform additional recording.
- Once a DVD-RW recorded in Video Mode is finalized, it becomes DVD-Video.
- In both modes, playback can be performed before and after finalization, but additional recording, deleting and editing cannot be performed after finalization.
- If you want to record the disc in VR Mode and then record in V Mode, be sure to execute Format. Be careful when executing Format because all the recorded data may be lost.
- A DVD-RW blank disc is initialized to Video Mode when first initialized.

• DVD-RW (VR mode)

- This is a format that is used for recording data on a DVD-RAM or DVD-RW disc. You can repeat recording, editing, deleting, partial deletion, creation of playlist, and etc.
- A disc that is recorded in this mode may not be played by existing DVD players.

• DVD-RW (Video mode)

- This is a format that is used for recording data on a DVD-RW or DVD-R disc. The disc can be played by an existing DVD player once it has been finalized.
- If a disc that has been recorded in Video mode by a different manufacturer's recorder but has not been finalized it cannot be played or additionally be recorded by this recorder.

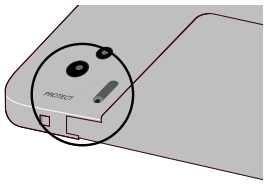
DVD-RAM Disc Playback and Recording

- DVD-RAM discs come with or without a cartridge. For this product, we recommend DVD-RAM discs that come with cartridges.
- Some cartridges are able to eject the disc inside. Even if you are able to eject the disc, always use the disc with the cartridge to ensure correct operation.
- DVD-RAM discs have a Write Protect tab in order to avoid accidental erasure of recorded data. With the Write Protect tab set to PROTECT, you can play the disc, but recording or erasing will not work. Set the Write Protect tab to UNPROTECT to format the disc or erase data.
- Ensure that the recording mode is set to VR mode. Otherwise, this product will not be able to play the recording.
- You cannot play a DVD-RAM in most DVD players due to compatibility issues.
- Only DVD-RAM standard Version 2.0 discs can be played in this unit.
- DVD-RAM recorded on this unit may not work with other DVD Players. To determine compatibility with these DVD-RAM discs, refer to the user's manual for the player.
- This unit is compatible with both non-cartridge and cartridge DVD-RAM, but the write-protect tabs on cartridge-type discs give better protection to your recordings.

COPY PROTECTION

- Many DVD discs are encoded with copy protection. Because of this, you should only connect your DVD Recorder-VCR directly to your TV, not to a VCR. Connecting to a VCR results in a distorted picture from copy-protected DVD discs.
- This product incorporates copyright protection technology that is protected by methods claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

Protection



This DVD Recorder-VCR can allow you to protect the contents of your discs, as described below.

- Cartridge-protected: With the write-protect tab set in the protect position, the contents of the disc cannot be recorded, edited, or erased.
- Program-protected: See page 82 "Locking a Disc Navigation Entry"
- Disc-protected: See page 94, 95 "Disc Protection"

✻ DVD-RAM/DVD-RW/DVD discs that are incompatible with the DVD-VIDEO format cannot be played with this product.

✻ For more information on recording a DVD, consult your DVD-RAM/DVD-RW/DVD-R manufacturer.

✻ If poor quality DVD-RAM/DVD-RW/DVD-R discs are used, your recordings may fail.

Do not use the following discs!

- DVD-Audio, CDV, CVD, Photo-CD, SACD, MV-Disc, PD, LD, CD-G, CD-I, CD-ROM, DVD-ROM, VCD, DVD+R and DVD+RW discs should not be used in this product.

[Note]
Disc types that can be played : CD/CD-R/CD-RW/MP3/ JPEG/DVD-Video/DVD-RAM/ DVD-RW/DVD-R.
However, if your DVD-RW disc was recorded with another device, it can be played only if it was recorded and finalized in Video Mode.

- Some commercial discs and DVD discs purchased outside your region may not be playable with this product. When these discs are played, either "No disc." or "Please check the regional code." will be displayed.
- If your DVD-RW disc is an illegal copy or is not in DVD video format, it may also not be playable.

✻ We recommend using Hitachi Maxell discs as they have been confirmed to be compatible with this unit. Other discs may not perform correctly.

A NOTE ABOUT RECYCLING
This product's packaging materials are recyclable and can be reused. Please dispose of all materials in accordance with your local recycling regulations.
Batteries should never be thrown away or incinerated but disposed of in accordance with your local regulations concerning chemical wastes.
Alliance: www.eiae.org

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General Features

The DV-RF7U allows you to record and play back high quality digital images on a DVD-RAM/DVD-RW/DVD-R disc. You can also edit digital images on DVD-RAM/ DVD-RW discs.

High quality digital audio and video recording and playback

Record up to about 12-hour images with a double sided 9.4 GB DVD-RAM disc, and up to about 6-hour images with a 4.7 GB DVD-RAM disc, depending on the recording mode.

Creating DVD video title using DVD-RW/DVD-R disc

With DV-RF7U, create your own DVD video title on 4.7 GB DVD-RW/DVD-R discs.

A Variety of Recording Options

Select an appropriate recording mode between XP, SP, LP and EP to meet your recording needs. (See pages 64~65.)
- XP mode - High quality, about 1 hour
- SP mode - Standard quality, about 2 hours
- LP mode - Low quality, about 4 hours
- EP mode - Lower quality, about 6 hours

Copying digital camcorder content using DV input jack

Record digital camcorder images onto DVD-RAM/DVD-RW/DVD-R discs using the DV input jack (IEEE 1394-4pin). (See page 71.)

Time Slip and Picture In Picture (P in P)

Use the Time Slip function to play back the recorded images while a recording is proceeding (DVD-RAM only). Use the P in P function to view the playback and recording screens at the same time.

High quality progressive scan

Progressive scanning provides high resolution and flicker free images. The 10-bit 54-MHz DAC, 2D Y/C Separating circuitry and Time Base Corrector processor technology provide you with the highest image playback and recording quality. (See pages 18~19.)

A variety of functions with easy-to-use user interface

Integrated menu system and messaging functionality allow you to perform the desired operations easily and conveniently. With a DVD-RAM/DVD-RW (VR mode) disc, you can edit recorded images, create playlist, and edit images in specific sequence according to your needs.

Before Reading the Instruction Manual

Make sure to check the following matters before reading the instruction manual.

Icons that will be used in manual

Icon	Term	Definition
DVD	DVD	This involves a function available in DVD or Video Mode DVD-R
RAM	RAM	This involves a function available in DVD-RAM
RW	RW	This involves a function available in DVD-RW
R	R	This involves a function available in DVD-R
CD	CD	This involves a function available in a data CD (CD-ROM, CD-R, or CD-RW)
JPEG	JPEG	This involves a function available in a data picture CD (CD-ROM, CD-R, or CD-RW)
MP3	MP3	This involves a function available in a data CD (CD-ROM, CD-R, or CD-RW on which MP3 is recorded)
	NOTE	This involves tips or instructions on the page that help each function operate
Preliminary	Preliminary	Check items before operating each function

About the use of this instruction manual

1) Be sure to be familiar with Safety Instructions before using this product. (See pages 2~6)
2) If a problem occurs, check for Troubleshooting. (See pages 101~103)

How to use the DVD Recorder-VCR

Step 1 Select the disc type

This unit can record on the following types of discs.
If you want to repeatedly record on the same disc or you want to edit the disc after recording, select a rewritable DVD-RW or DVD-RAM type disc. If you want to save a recording without any changes, choose a non-rewritable DVD-R.

DVD RAM DVD RW DVD R

Step 2 Format the disc to start recording

Unlike a VCR, the recorder automatically starts formatting when an unused disc is inserted. This is required for the preparation of recording on a disc.

Using a DVD-RAM
This type of disc can be formatted in DVD-Video Recording format (VR mode). You can edit recorded images and create a playlist in a specific sequence according to your requirements.

Using a DVD-RW
This type of disc can be formatted in either DVD-Video format (Video mode) or DVD-Video Recording format (VR mode). For an unused disc, a message that asks whether to format in Video Mode or not is displayed. You can play a video mode disc on various DVD components. A VR mode disc allows more varied editing.

Using a DVD-R
This type of disc can be formatted in DVD Video format. When formatting is complete, you can record on the disc. You can play this type of disc on various DVD components only when they have been finalized.

Note
- You can only use one format on a DVD-RW.
- You can change the DVD-RW format to another format. It should be noted that the data on the disc may be lost when changing formats.

Step 3 Recording

There are two different recording methods: Direct Recording and Timer Recording. Timer recording is classified as recording type: Once, Daily or Weekly or recording mode: XP (high quality mode), SP (standard quality mode), LP (long recording mode), and EP (extended mode) according to the recording mode.

Step 4 Playing

You can select the title you want to play in a displayed menu and then immediately start playback.

A DVD consists of sections, called titles, and sub sections, called chapters.

During recording, a title is created between two points where you start and stop recording, DVD-R/DVD-RW discs (in Video mode) can automatically create chapters according to the recording mode when finalized.

Step 5 Editing a recorded disc

Editing on discs is easier than conventional video tapes. The recorder supports many different edit functions, possible only with DVDs.
With a simple and easy edit menu, you can operate various edit functions, such as delete, dubbing, rename, lock, etc., on a recorded title.

Creating a playlist (DVD-RAM/-RW in VR mode)
With this recorder, you can create a new playlist on the same disc and edit it without the change of the original recording.

Step 6 Finalizing & Playing on other DVD components

To play your DVD on other DVD components, finalizing may be necessary. First, finish all editing and recording operations, then finalize the disc.

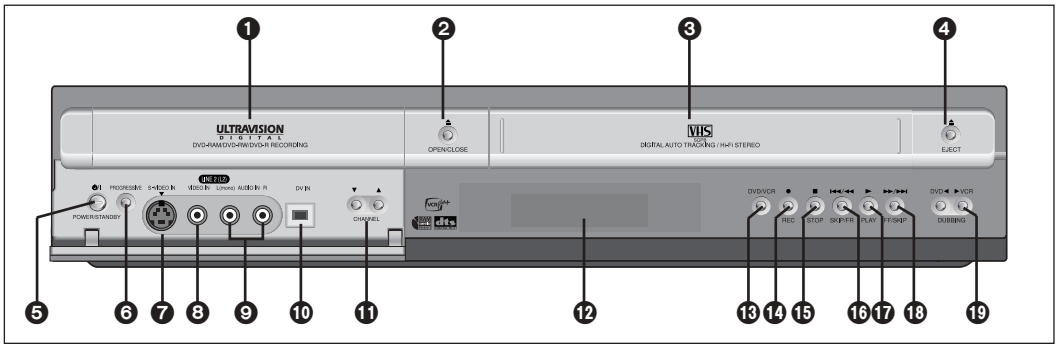
When using a DVD-RW disc in VR Mode
Although finalizing is generally unnecessary when playing the disc on a VR Mode compatible component, a finalized disc should be used for playback on that type of component.

When using a DVD-RW disc in Video Mode
The disc should be finalized first to enable playback on any DVD components other than this recorder. No more editing or recording can be made on the disc once it has been finalized.
To enable recording on the disc again, Disc should be unfinalized.

When using a DVD-R disc
You should finalize the disc to play it on a component other than this recorder. You cannot edit or record on the disc once it has been finalized.

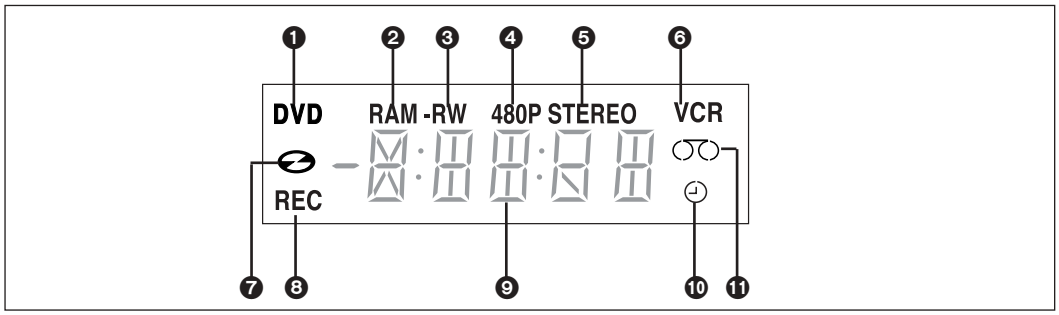
Description

Front Panel



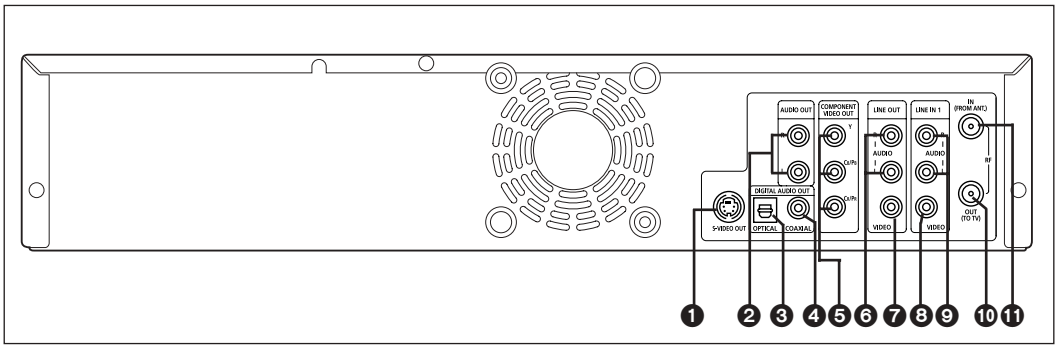
1. DVD DECK
2. DVD OPEN/CLOSE BUTTON
3. VCR DECK
4. VCR EJECT BUTTON
5. POWER BUTTON
   Press to turn the power on and off.
   (As to the indication of the Operate switch, "I" shows ON and "⏻" shows electrical power stand-by.)
6. PROGRESSIVE BUTTON
7. S-VIDEO INPUT JACK
8. VIDEO INPUT JACK
9. AUDIO L/R INPUT JACKS
10. DV INPUT JACK
11. CHANNEL ∨ / ∧ BUTTONS
12. FRONT PANEL DISPLAY
13. DVD/VCR SELECT BUTTON
14. RECORD BUTTON
15. STOP BUTTON
16. SKIP/FR BUTTON
17. PLAY BUTTON
18. F.F/SKIP BUTTON
19. DUBBING BUTTONS

Front Panel Display



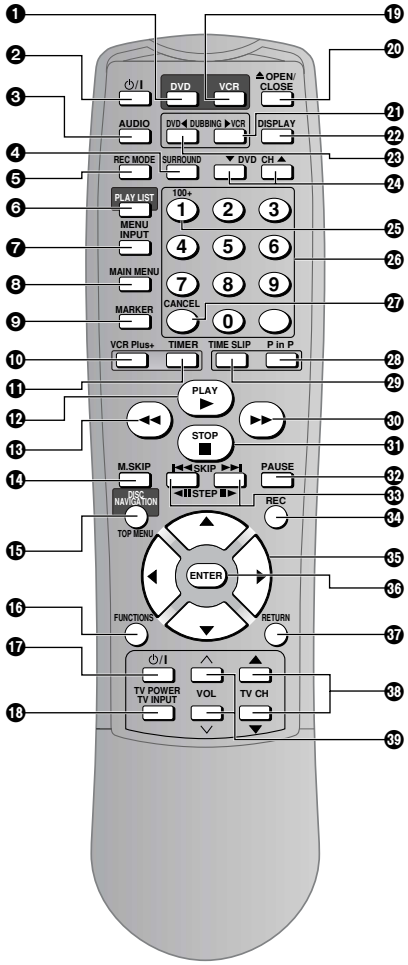
1. When the indicator is on, DVD is activated.
2. DVD-RAM is activated.
3. DVD-R or DVD-RW is activated.
4. Progressive Scan mode is working.
5. When you watch SAP/STEREO channel or play back Hi-Fi VCR tapes, STEREO indicator lights.
6. VCR is activated.
7. DVD or CD media is loaded.
8. Record function is working.
9. The time, counter position or current deck status is indicated.
10. When you set a Timer recording, this indicator is lit.
11. VHS Videotape is loaded.

Rear Panel



1. S-VIDEO OUT JACK
2. AUDIO OUT R/L JACKS
3. DIGITAL AUDIO OUT JACK (OPTICAL)
4. DIGITAL AUDIO OUT JACK (COAXIAL)
5. COMPONENT VIDEO OUT JACKS
6. LINE OUT AUDIO R/L JACKS
7. LINE OUT VIDEO JACK
8. LINE IN 1 VIDEO JACK
9. LINE IN 1 AUDIO R/L JACKS
10. RF OUT TO TV JACK
11. RF ANTENNA INPUT JACK

Tour of the Remote Control



1 DVD Button
Press this when you use a DVD.

2 POWER Button

Press to turn the power on and off.
(As to the indication of the Operate switch, "I" shows ON and "⏻" shows electrical power stand-by.)

3 AUDIO Button
Use this to access various audio functions on a disc (DVD mode).

4 SURROUND Button
Gives surround-sound effect even with only two front speakers (L/R).

5 REC MODE Button

6 MENU/PLAY LIST Button
Use this to return to the Title menu, or to view the recorded files list.

7 INPUT Button
Select line input signal in external input mode (Tuner or Line input)

8 MAIN MENU Button
Brings up the DVD Recorder-VCR's setup menu.

9 MARKER Button
Use this to mark a position while playing a disc.

10 VCR Plus+ Button
Press this button and input VCR Plus+ codes to preset the timer for recording.

⓫ **TIMER Button**
Used to preset the timer for programmed recording.

⓬ **PLAY Button**

⓭ **REVERSE Button**

⓮ **MANUAL SKIP Button**
Pressing this button during playback will skip to a scene 30 seconds forward.

⓯ **TOP MENU/DISC NAVIGATION Button**
Use this to enter the View Recoding list/disc menu.

⓰ **FUNCTIONS Button**
Use this to view the status of the disc that is being played.

⓱ **TV POWER Button**

⓲ **TV INPUT Button**
To switch the TV channel to that for external input.

⓳ **VCR Button**
Press this when you use the VCR.

⓴ **OPEN/CLOSE Button**
To open and close the disc tray.

㉑ **VCR DUBBING Button**
Press this when you copy DVD to VCR.

㉒ **DISPLAY Button**
This will display current setting or disc status.

㉓ **DVD DUBBING Button**
Press this when you copy VCR to DVD.

㉔ **DVD CHANNEL Buttons**
To switch the channel on this DVD Recorder-VCR.

㉕ **1/100+ Button**
Extended pressing of numeric button “1” will deliver “100”.

㉖ **Numeric Buttons**

㉗ **CANCEL Button**

㉘ **P in P Button**
Use to watch a subprogram on the PIP screen while watching the main program on the main screen.

㉙ **TIME SLIP Button**

㉚ **FORWARD Button**

㉛ **STOP Button**

㉜ **PAUSE Button**
Use this to pause during recording or playback.

㉝ **SKIP/STEP Button**

㉞ **REC Button**
Use to make a recording on DVD-RAM/-RW/-R discs.

㉟ **DIRECTION Buttons**
(UP/DOWN or LEFT/RIGHT Buttons)

㊱ **ENTER Button**

㊲ **RETURN Button**
Returns to a previous menu.

㊳ **TV CHANNEL Buttons**
To select a TV channel.

㊴ **TV VOLUME Buttons**
TV volume adjustment

Connecting & Setting Up

- *Quick Overview 15*
- *Unpacking 16*
- *Connecting the Antenna Cable 16*
- *Connecting the Video Cable 17*
- *Connecting the Audio Cable 19*
- *Connecting External Devices 21*
- *Connecting the Power Cord 22*
- *Preparing the Remote Control 22*

Quick Overview

A Quick Overview presented in this guide will give you enough information to start using the recorder.

Step 1 : Unpacking

▼

Step 2 : Connecting the Antenna Cable

▼

Step 3 : Connecting the Video Cable

▼

Step 4 : Connecting the Audio Cable

▼

Step 5 : Connecting External Devices

▼

Step 6 : Connecting the Power Cord

▼

Step 7 : Preparing the Remote Control

- **Note to CATV system installer:** This reminder is provided to call CATV system installer's attention to Article 820-40 of the National Electrical Code (Section 54 of Canadian Electrical Code, Part I) that provides guidelines for proper grounding, and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

Step 1: Unpacking

Accessories

Check for the supplied accessories below.
- Video/Audio Cable
- RF Cable for TV
- Remote Control
- Instruction Manual
- Batteries for Remote Control (AA Size)

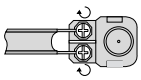
Dispose of batteries according to local environmental regulations. Do not put them in the household trash.

Step 2: Connecting the Antenna Cable

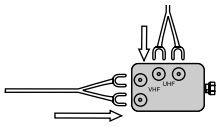
There are several ways to connect your DVD Recorder-VCR. Select one of the following antenna connections that best suits you.
- Method 1 : Antenna + DVD Recorder-VCR + TV : No Cable box
- Method 2 : Antenna + Cable box + DVD Recorder-VCR + TV : Cable box with many scrambled channels
- Method 3 : Antenna + DVD Recorder-VCR + Cable box + TV : Cable box with a few scrambled channels

Note

■ If you are using an off-air antenna that has 300-ohm twin flat leads, use an external antenna connector (300-75 ohm adapter: not supplied) to connect the antenna to the DVD Recorder-VCR.



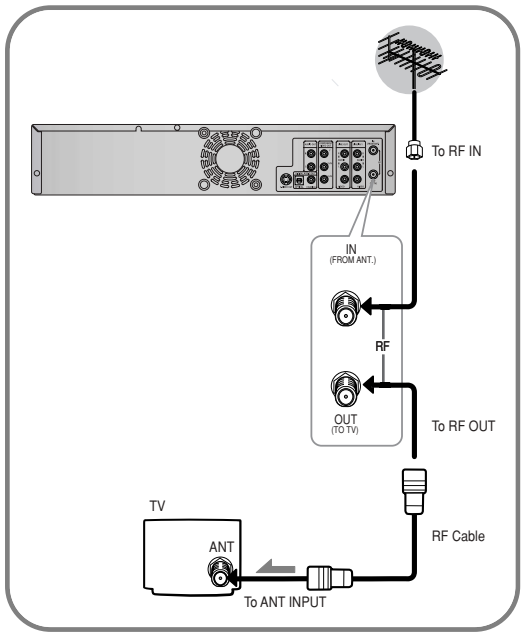
■ If you have two separate antennas (one VHF and one UHF), use a UHF/VHF combiner-adapter (available at most electronics shops) to connect the antenna to the DVD Recorder-VCR.



■ The VHF/UHF RF OUT jack of this product sends only signals received through the antenna. It does not output audio/video signals. You must connect audio/video cable to view Video from the unit. (i.e. DVD playback)

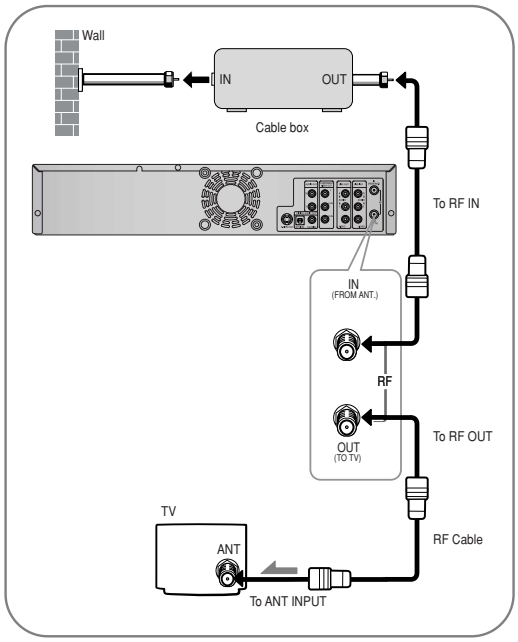
Method 1: Antenna + DVD Recorder-VCR + TV: No Cable box

You can record non-scrambled channels by selecting the channel on the DVD Recorder-VCR. Also use this Method if you watch channels without cable box.



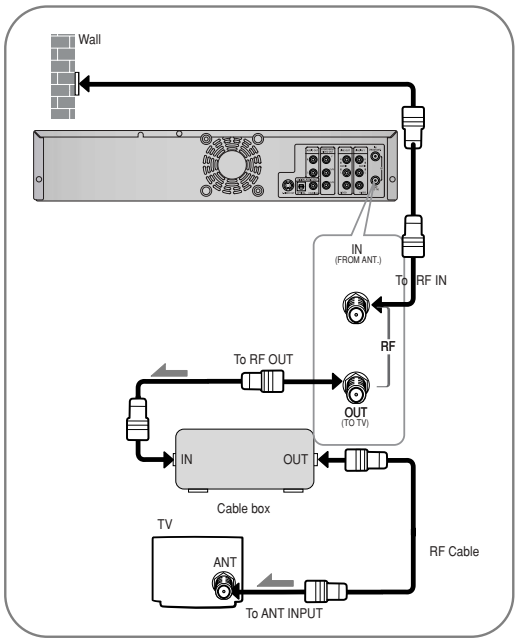
Method 2: Antenna + Cable box + DVD Recorder-VCR + TV: Cable box with many scrambled channels

You can record channels by selecting the channel on the cable box. You cannot record one channel while watching another channel. Be sure that the cable box is turned on.



Method 3: Antenna + DVD Recorder-VCR + Cable box + TV: Cable box with a few scrambled channels

You can record non-scrambled channels by selecting the channel on the cable box. You cannot record scrambled channels that require a cable box.



Step 3: Connecting the Video Cable

There are several ways to connect your DVD Recorder-VCR. Select one of the following video connection methods that best suits you.

- Method 1 : Connecting to a Video input jack
- Method 2 : Connecting to an S-video input jack
- Method 3 : Connecting to Component video input jacks in 525i/480i mode
- Method 4 : Connecting to Component video input jacks in 525p/480p mode

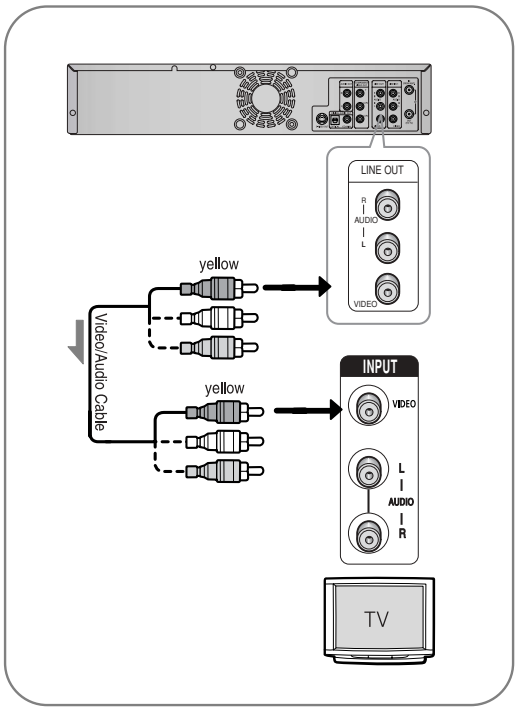
S-Video, Component Video and Progressive Output Modes

- S-Video and Component Video output are usable only if your TV supports S-Video input or Component Video input, respectively. If S-Video or Component Video output does not work, check the TV connections and the TV input selection settings.
- Compared to standard interlaced video, progressive scan doubles the amount of video beam lines fed to your TV, resulting in a more stable, flicker-free, and clearer image than interlaced video. The progressive scan video output jack is used in progressive output mode. This is only available with TVs that support progressive scan.
- Consumers should note that not all high definition television sets are fully compatible with this product and may cause artifacts to be displayed in the picture. If you experience 525 progressive scan picture problems, it is recommended that you switch the connection to the 'standard definition' output.

Method 1: Connecting to a video input jack

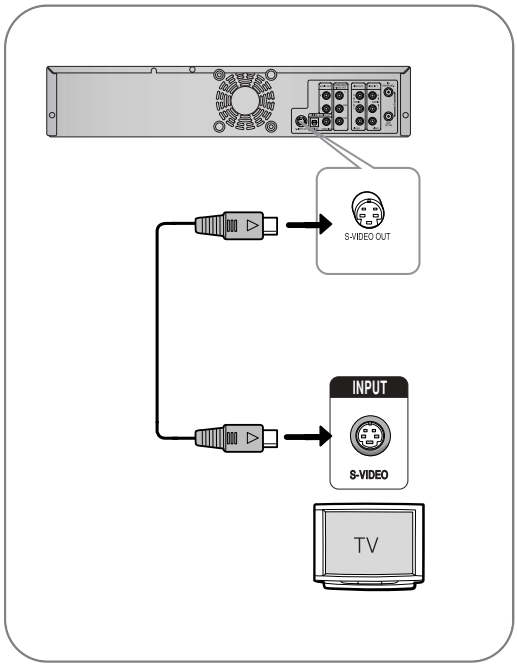
Connect a video (yellow) cable between the VIDEO (yellow) OUT jack on DVD Recorder-VCR and VIDEO (yellow) IN jack on the TV (or AV amplifier)

- You will enjoy regular quality images.
- Connect audio cables (white and red) between the ANALOG AUDIO OUT jack on the DVD Recorder-VCR and AUDIO IN jack on TV (or AV amplifier)



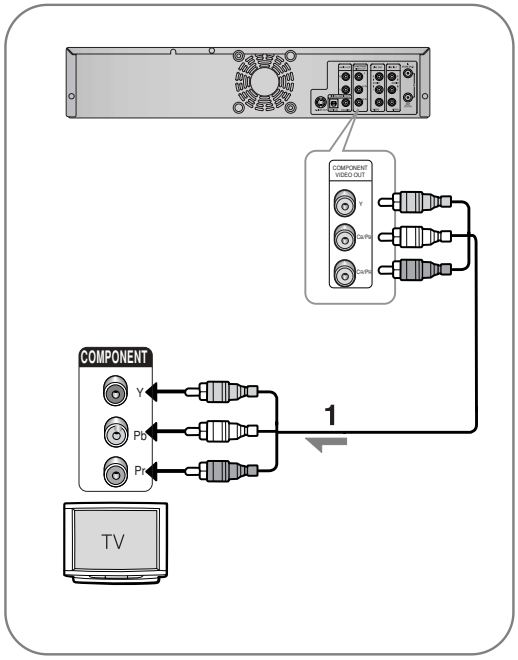
Method 2: Connecting to an S-video input jack

Connect an S-video cable (not supplied) between the S-VIDEO OUT jack on DVD Recorder-VCR and S-VIDEO IN jack on the TV (or AV amplifier).
• You will enjoy high quality images.



Method 3: Connecting to Component video input jacks (Y, CB/PB, CR/PR) in 525i/480i mode

1. Connect Component video cables (not supplied) between the COMPONENT VIDEO OUT jacks on DVD Recorder-VCR and COMPONENT VIDEO IN jacks on the TV (or AV amplifier).
2. Make sure that the disc has stopped completely before changing the mode.
   If nothing is displayed on front panel display, it is 525i/480i Mode.



• You will enjoy high quality accurate color reproduction.

Note

■ Make sure that the color coded connections match. The Y, PB and PR component output jacks of your DVD Recorder-VCR must be connected to the exact corresponding component input jacks on your TV. Otherwise, red or blue images will be displayed on the TV screen.

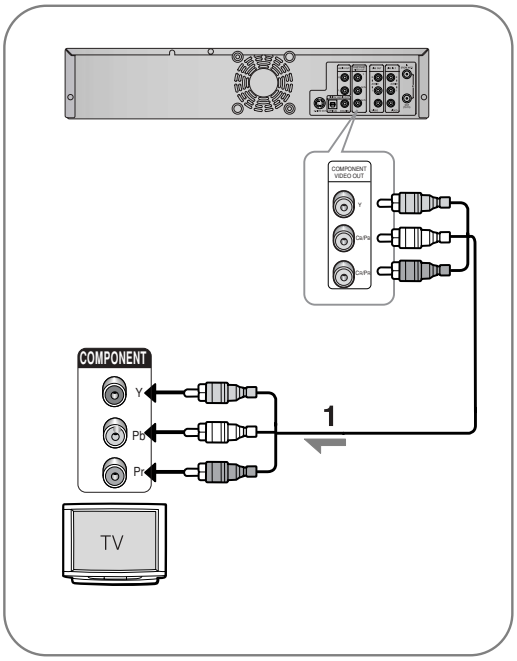
■ Make sure that the left and right audio output jacks of your DVD Recorder-VCR are connected to the left and right audio input jacks of your TV, respectively (page 19).

Method 4: Connecting to Component video input jacks (Y, CB/PB, CR/PR) in 525p/480p mode

Your TV must support progressive scan input to allow you to watch 525p/480p video output.

1. Connect Component video cables (not supplied) between the COMPONENT VIDEO OUT jacks on DVD Recorder-VCR and COMPONENT VIDEO IN jacks on the TV (or AV amplifier).

2. Press the Progressive button on the front panel. The message “Press “Yes” to confirm Progressive scan mode. Otherwise press “No”.” will be displayed. If you want 525P/480P mode, select Yes. If “480P” is displayed on the front panel display, now your DVD Recorder-VCR is operated on 525P/480P Mode. Make sure that the disc has stopped completely before changing the mode.



Note

- Make sure that the color coded connections match. That is, the Y, PB and PR component output jacks of your DVD Recorder-VCR should be connected to the exact corresponding component input jacks on your TV. Otherwise, red or blue images will be displayed on the TV screen.
- Once 525p/480p video output mode is selected, Video, S-Video and 525i/480i outputs are disabled.
- Make sure that the left and right audio output jacks of your DVD Recorder-VCR are connected to the left and right audio input jacks of your TV, respectively (page 19).

Step 4: Connecting the Audio Cable

There are several ways to connect your DVD Recorder-VCR. Select the audio connections that best suits you.

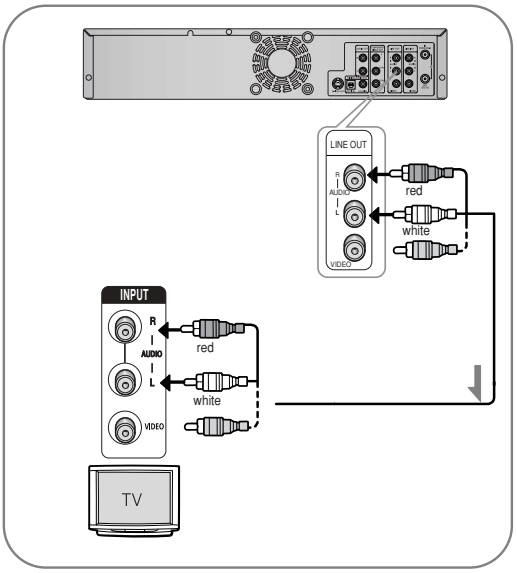
- **Method 1**: Connecting to your TV
- **Method 2**: Connecting to a stereo amplifier with analog input jacks.
- **Method 3**: Connecting to an AV amplifier with a digital input jack.

Manufactured under license from Dolby Laboratories. “Dolby” and the double-D symbol are trademarks of Dolby Laboratories.

“DTS” and “DTS Digital Out” are trademarks of Digital Theater Systems, Inc.

Method 1: Connecting to your TV

This connection will use your TV’s speakers.

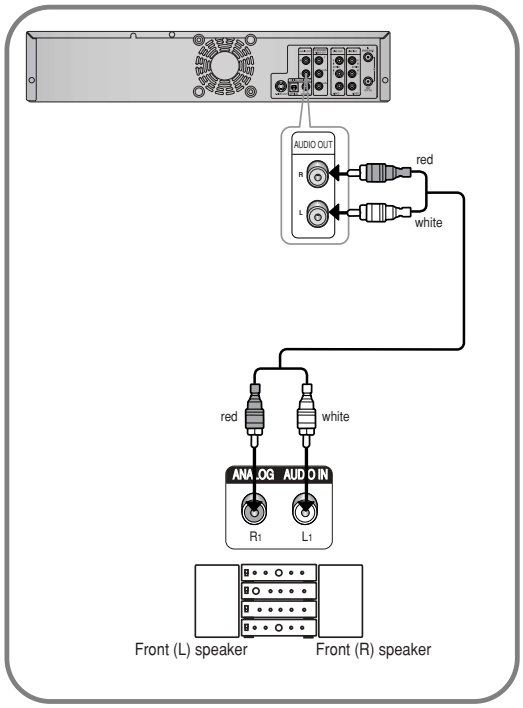


Note

- The VCR video and audio are also output from the following jacks: During DVD recording, the video and audio that the DVD recorder is recording are output:
  - Audio output R/L jacks
  - S-video output jack
  - Component video output jacks

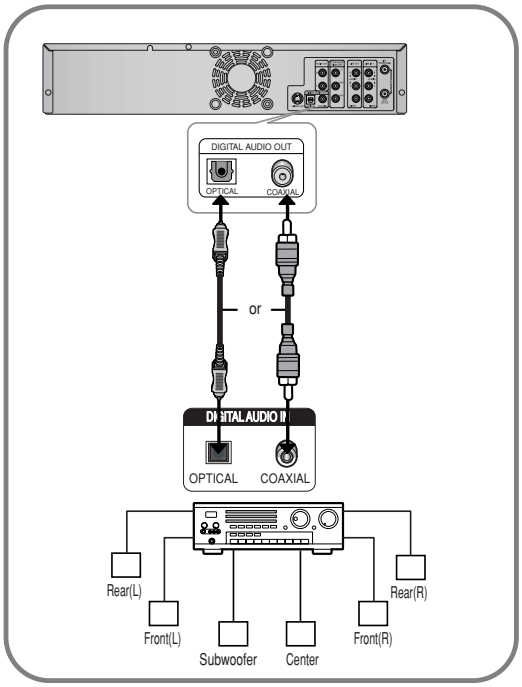
Method 2: Connecting to a stereo amplifier with analog input jacks

If your stereo amplifier has audio input jacks (L and R) only, use the analog audio out jacks.



Method 3: Connecting to an AV amplifier with a digital input jack

If your AV amplifier has a Dolby Digital or DTS decoder and a digital input jack only, use this connection.
To enjoy Dolby Digital or DTS sound, you must set up the audio settings. (See page 29)



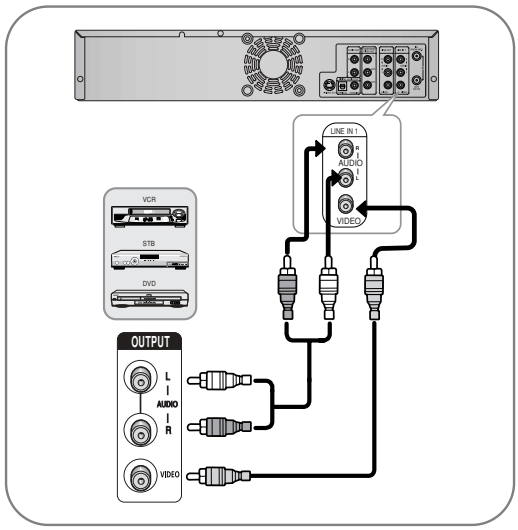
Step 5: Connecting External Devices

This allows you to connect your DVD Recorder-VCR to other external devices and view or record their outputs.

- **Method 1**: Connecting a VCR, Set-Top Box (STB) or DVD player to the LINE IN 1 jacks.
- **Method 2**: Connecting a Camcorder to the LINE IN 2 jacks.
- **Method 3**: Connecting a Camcorder to the DV IN jack.

Method 1: Connecting a VCR, Set-Top Box (STB) or DVD player to the LINE IN 1 jacks

Connecting a VCR or external device to AUDIO/VIDEO LINE IN 1 jacks of the DVD Recorder.
You can record from connected equipment (VCR, STB or DVD).

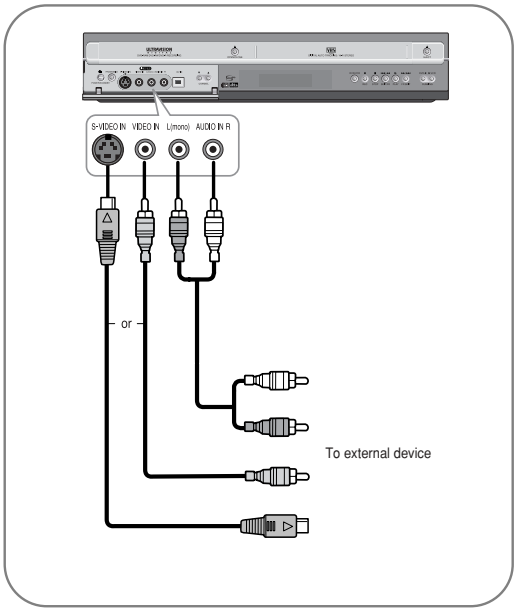


Note

- You can also use the LINE IN 2 jacks on the front panel of the DVD Recorder.
- When the S-Video jack and Video jack are both connected, the S-Video jack will have priority. Line Selection will be automatically done.
- Copy protected content cannot be recorded.

Method 2: Connecting a Camcorder to the LINE IN 2 jacks

You can also use the LINE IN 2 jacks on the front panel of the DVD Recorder. You can record from connected equipment.
When an input source is inserted into LINE IN 2 while viewing TV, the input will be switched to LINE IN 2 automatically.



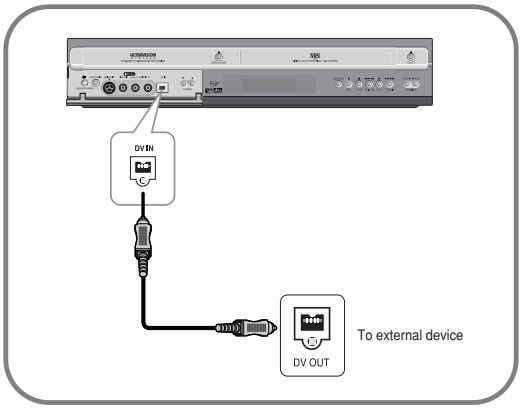
Note

- If both video and S-video jacks are connected, the jack connected later will be valid. Usually, connect to either jack.
- If both video and S-video jacks are connected, you can choose either using menu “Setup” - “System” – “Video Input” (see page 36).

Method 3: Connecting a Camcorder to the DV IN jack

If your camcorder has a DV output jack, connect it to the DV input jack of your DVD Recorder-VCR.

• If your camcorder has a DV output jack, see page 71 for more information.



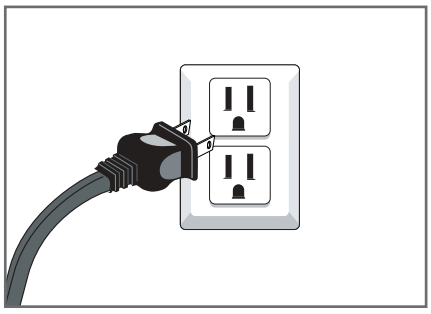
Step 6: Connecting the Power Cord

After all connections are complete, plug the power cord in wall outlet.

"AUTO" in the front panel display flickers. This means that the current time is being set automatically (Auto Program) through the antenna under connection. The setup may take several minutes.

When it normally operates, the current time is automatically set and displayed in the front panel display.

If "- - - -" appears, however, it means that auto time setting has failed.
In that case, set the current time through the manual clock set, as shown in pages 26~27.



Step 7: Preparing the Remote Control

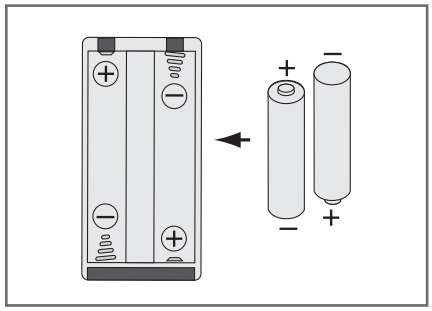
Install Batteries in the Remote Control

• Open the battery cover on the back of the remote.
• Insert two AA batteries. Make sure that the polarities (+ and -) are aligned correctly.
• Replace the battery cover.

If remote does not operate properly:

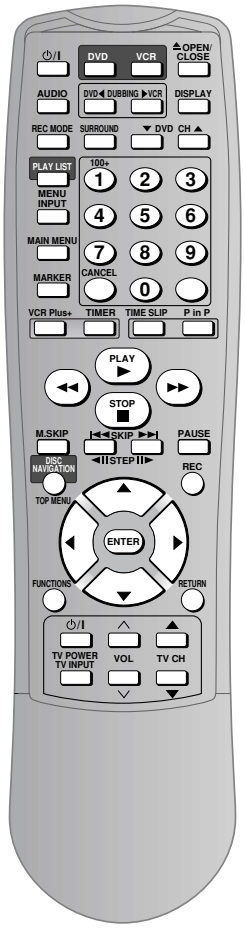
• Check the polarity + - of the batteries (Dry-Cell)
• Check if the batteries are dead.
• Check if remote sensor is blocked by obstacles.
• Check if there is any fluorescent lighting nearby.

Dispose of batteries according to local environmental regulations. Do not put them in the household trash.



Setting the Remote Control

The remote control will work with Hitachi televisions and compatible brands.



To determine whether your television is compatible, follow the instructions below.

1. Switch your television on.
2. Point the remote control towards the television.
3. Hold down the TV POWER button and enter the two-figure code corresponding to the manufacturer of your television, by pressing the appropriate button on remote control.

Manufacturer	Button on remote control	Manufacturer	Button on remote control
Hitachi	[1]	SHARP 2	[9]
SONY	[2]	TOSHIBA	[0]
RCA	[3]	JVC	[CANCEL]
SANYO	[4]	MITSUBISHI	⬭
ZENITH	[5]	MAGNAVOX	[VCR Plus+]
PANASONIC 1	[6]	FUNAI	[TIMER]
PANASONIC 2	[7]	GOLDSTAR	[TIMESLIP]
SHARP 1	[8]	SAMSUNG	[P in P]

Result: If your television is compatible with the remote control, it will switch off.
It is now programmed to operate with the remote control.

Note

■ If several codes are indicated for your television brand, try each one in turn until you find one that works.

You can then control the television using the following buttons.

Button	Function
TV POWER	Used to switch the television on and off.
TV INPUT	Used to select an external source.
VOL (∧ or ∨)	Used to adjust the volume of the television.
CH (▲ or ▼)	Used to select the required channel.

Note

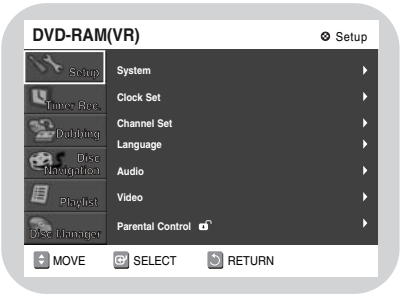
■ The various functions will not necessarily work on all televisions. If you encounter problems, operate the television directly.

System Setup

- *On-Screen Menu Navigation 24*
- *Auto Clock Set 25*
- *Manual Clock Set 26*
- *Channel Set 27*
- *Setting Up the Language Features . 28*
- *Setting Up the Audio Options 29*
- *Setting Up the Display (Video) Options 30*
- *Setting Up the Parental Control 31*
- *Auto Channel Memory 32*
- *Channel Add/Delete 33*
- *Guide Channel Setup 34*
- *VCR Setting 35*
- *Video Input 36*
- *Front Display 37*

On-Screen Menu Navigation

The on-screen menus allow you to enable or disable various functions on your DVD Recorder-VCR. Use the following buttons to open and navigate through the on-screen menus.



1 MAIN MENU Button

Press this button on the remote control while the DVD or VCR is in Stop or Play mode to open the on-screen MAIN MENU.

2 DIRECTION Buttons

Use these buttons to move the selection bar up/down and left/right to cycle through the menu options.

3 ENTER Button

Press this button on the remote control to designate any new settings.

4 RETURN Button

Press this button on the remote control to return to the last MENU screen displayed or to exit the on-screen MENU all together.

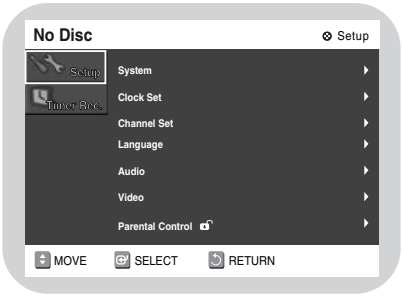
Note

■ Press the RETURN or ◀ button to return to the previous menu. Press the MAIN MENU button to exit the MAIN menu.

Auto Clock Set

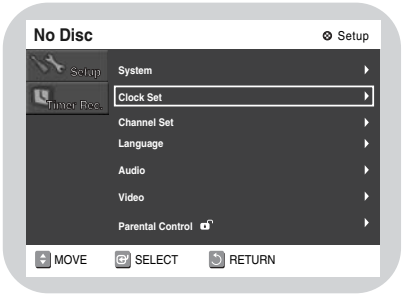
This menu is used to set the current time. You need to set the time to use timer recording.

1 With the unit in Stop mode, press the MAIN MENU button.

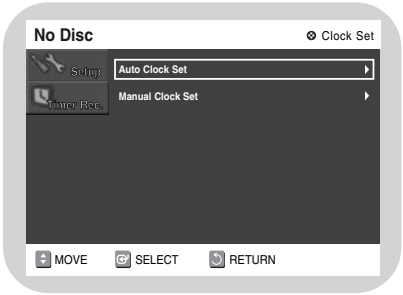


2 Using the ▲▼ buttons, move the selection bar to "Setup", then press the ► or ENTER buttun to select.

3 Select "Clock Set" using the ▲▼ buttons, then press the ► or ENTER button.



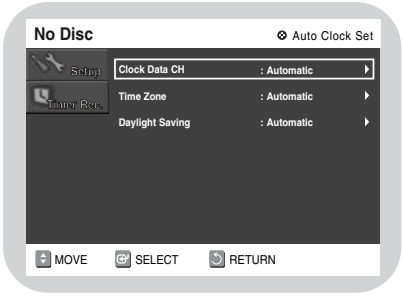
4 Select "Auto Clock Set" using the ▲▼ buttons, then press the ► or ENTER button.



Note

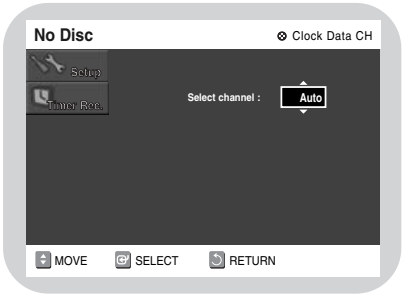
- You must have the antenna connected to set the Auto Clock. See page 16-17 for Antenna Connections
- The clock will be automatically set when you turn off the recorder.

5 Select the sub menu (Clock Data CH, Time Zone or Daylight Saving) using the ▲▼ buttons, then press the ► or ENTER button.



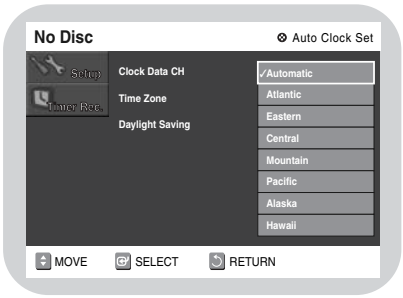
Clock Data CH

Select a channel that carries a time signal using the ▲▼ buttons then press the ► or ENTER button. Select Auto to set the channel automatically.



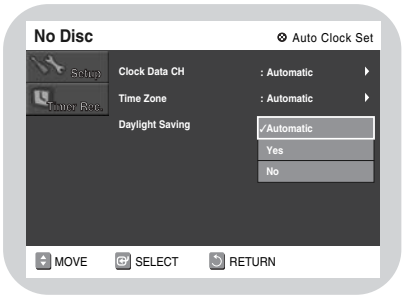
Time Zone

Select the time zone of your area using the ▲▼ buttons, then press the ► or ENTER button. Select Automatic to set the time zone automatically.



Daylight Saving

Select the Yes, No or Automatic using the ▲▼ buttons, then press the ► or ENTER button.
Select Automatic to set the daylight saving automatically.



Note

■ If your clock is set to the wrong time zone or daylight saving, you can adjust these settings without deactivating the Auto Clock Set function.

■ Press the RETURN or ◄ button to return to the previous menu. Press the MAIN MENU button to exit the MAIN menu.

Manual Clock Set

If Auto Setup fails to set the DVD Recorder-VCR's internal clock by locating a local TV station, follow these steps to set the date and time manually.
NOTE: For accurate Timer Recording, your DVD Recorder-VCR's internal clock must be set correctly.

1 Open "MENU"

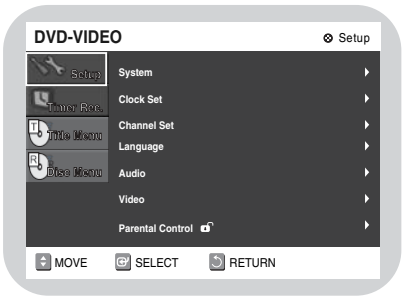
Press the MAIN MENU button while the DVD or VCR is in Stop mode.

2 Select "Setup"

Using the ▲▼ buttons, move the selection bar to "Setup", then press the ► or ENTER to select.

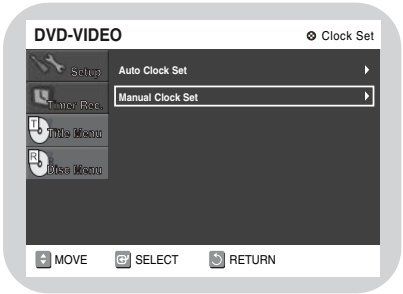
3 Select "Clock Set"

Use the ▲▼ buttons to highlight "Clock Set", then press the ► or ENTER button.



4 Select "Manual Clock Set"

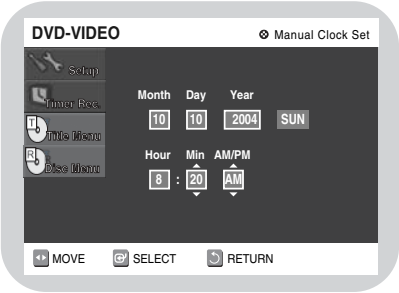
Move the highlight to "Manual Clock Set", then press the ► or ENTER button.
• The Clock Set will change as shown.



5 Set the Clock

Use the ◄► buttons to select each of the following options, then use the ▲▼ buttons to set each option:

- **Month** – Set the month
- **Day** – Set the day
- **Year** – Set the year
- **Hour** – Set the hour
- **Minute** – Set the minute
- **AM/PM** – Set the AM/PM



Note

■ Press the RETURN or ◄ button to return to the previous menu. Press the MAIN MENU button to exit the MAIN menu.

Channel Set

This feature allows you to manually set the DVD Recorder-VCR's tuner band to Antenna or Cable, whichever you connected to the Antenna In jack during initial setup.

- Use this setting only if Auto Setup detected the incorrect tuner band, i.e. channels are coming in on the wrong channel numbers.

1 Open "MENU"

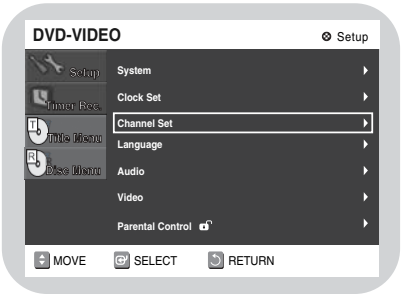
With the DVD in Stop, press the MAIN MENU button.

2 Select "Setup"

Using the ▲▼ buttons, move the selection bar to "Setup" then press the ► or ENTER button to select.

3 Select "Channel Set"

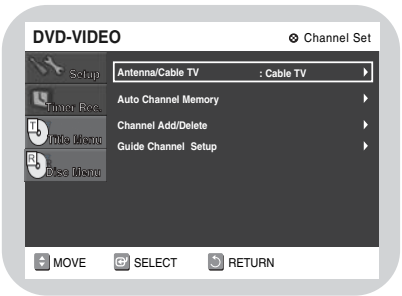
Using the ▲▼ buttons, move the selection bar to "Channel Set", then press the ► or ENTER button to select.



4 Select "Antenna/Cable TV"

Move the selection arrow to "Antenna/Cable TV", then press the ► or ENTER button to select from the following options:

- Antenna - Select if the DVD Recorder-VCR is connected to an indoor or outdoor VHF/UHF Antenna.
- Cable TV - Select if the DVD Recorder-VCR is connected to Cable TV.



Note

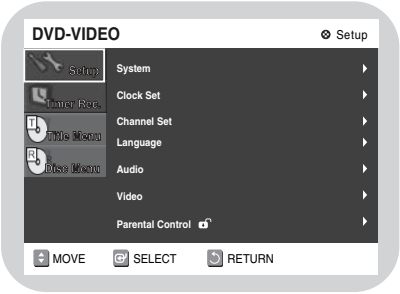
■ Press the RETURN or ◄ button to return to the previous menu. Press the MAIN MENU button to exit the MAIN menu.

Setting Up the Language Features

If you set the player menu, disc menu, audio and subtitle language in advance, they will come up automatically every time you watch a movie.

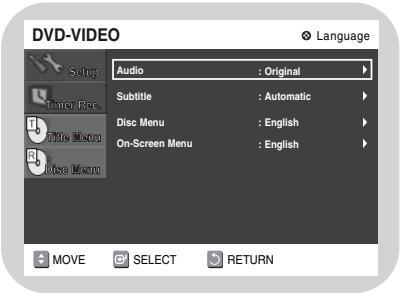
1 With the unit in Stop mode, press the MAIN MENU button on the remote.

2 Select “Setup” using ▲▼ buttons, then press the ► or ENTER button.

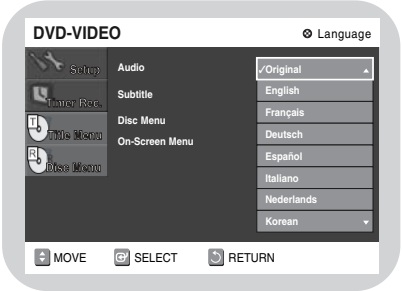


3 Select “Language” using ▲▼ buttons, then press the ► or ENTER button.
Language setup menu will be displayed.

4 Use ▲▼ buttons to select the desired sub menu and press the ENTER or ► button.



5 Select the desired Language using ▲▼ buttons, then press the ► or ENTER button.



Note

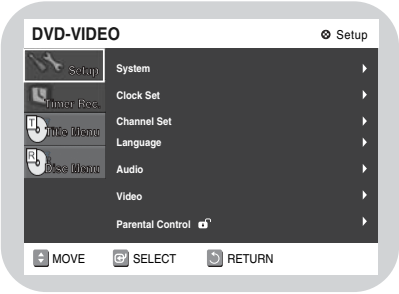
■ Press the RETURN or ◄ button to return to the previous menu. Press the MAIN MENU button to exit the MAIN menu.

Setting Up the Audio Options

If you set the player menu, disc menu, audio and subtitle language in advance, they will come up automatically every time you watch a movie.

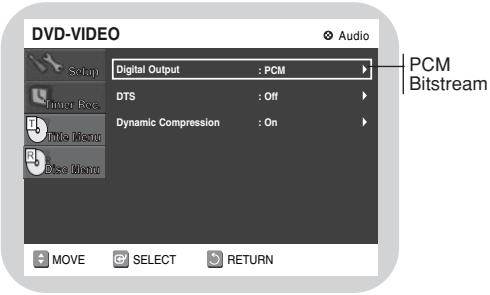
1 With the unit in Stop mode, press the MAIN MENU button on the remote.

2 Select “Setup” using ▲▼ buttons, then press the ► or ENTER button.



3 Select “Audio” using ▲▼ buttons, then press the ► or ENTER button.
Audio setup menu will be displayed.

4 Use ▲▼ buttons to select the desired sub menu and press the ENTER or ► button.



5 Use the ▲▼ buttons to select the desired item. Then press the ► or ENTER button.

Note

■ Press the RETURN or ◄ button to return to the previous menu. Press the MAIN MENU button to exit the menu.

Digital Output

1. PCM : Converts to PCM (2CH) 48kHz audio. Select PCM when using the Analog Audio Outputs.
2. Bitstream : Converts to Dolby Digital Bitstream (5.1CH). Select Bitstream when using the Digital Audio Output.

Note

■ Be sure to select the correct Digital Output, or no audio will be heard.

DTS

1. Off : Doesn’t output digital signal.
2. On : Outputs DTS Bitstream via digital output only. Select DTS when connecting to a DTS Decoder.

Note

■ When DTS soundtrack is played, sound is not output from Analog Audio Output.

Dynamic Compression

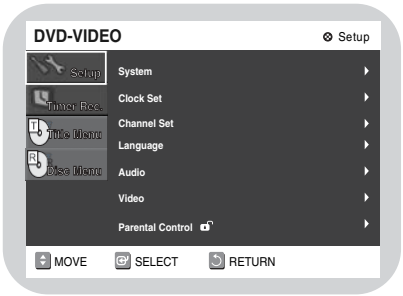
1. On : To select dynamic compression.
2. Off : To select the standard range.

Setting Up the Display (Video) Options

This function allows you to set up the TV screen settings.

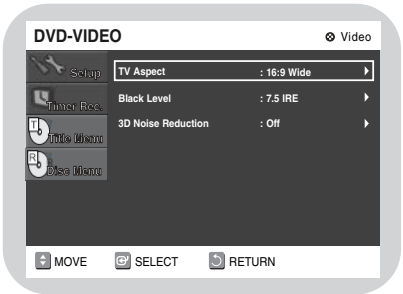
1 With the unit in Stop mode, press the MAIN MENU button on the remote.
You can't use the Setup functions during playback.

2 Select "Setup" using ▲▼ buttons, then press the ► or ENTER button.



3 Select "Video" using ▲▼buttons, then press the ► or ENTER button.
Video option menu will be displayed.

4 Select the sub menu using ▲▼ buttons, then press the ► or ENTER button.



5 Use the ▲▼ buttons to select the desired item, then press the ► or ENTER button.

Note

■ Press the RETURN or ◄ button to return to the previous menu. Press the MAIN MENU button to exit the menu.

Display (Video) Options

This function depends on disc type. It may not work for some disc types.

TV Aspect
Depending on the type of television you have, you may want to adjust the screen setting (aspect ratio).

- **4:3 Letter Box**: Select when you want to see the total 16:9 ratio screen DVD supplies, even though you have a TV with a 4:3 ratio screen. Black bars will appear at the top and bottom of the screen.
- **4:3 Pan - Scan**: Select this for conventional size TV when you want to see the central portion of the 16:9 screen. (Extreme left and right side of movie picture will be cut off.)
- **16:9 Wide**: You can view the full 16:9 picture on your widescreen TV.

Black Level
Adjusts the brightness of the screen.

- **7.5 IRE**: This is the standard NTSC reference black level for consistent brightness/contrast across all source.
- **0 IRE**: This will enhance the black level for increased brightness/contrast when viewing DVDs.

3D NR (Noise Reduction)

- **Off**: Normal
- **On**: Select to remove noise from the screen

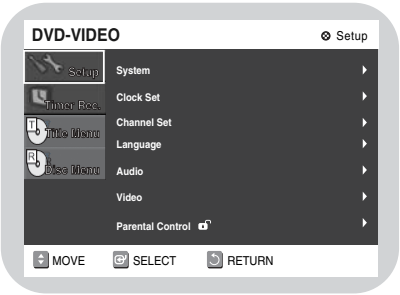
Setting Up the Parental Control

The Parental Control function works in conjunction with DVDs that have been assigned a rating - which helps you control the types of DVDs that your family watches. There are up to 8 rating levels on a disc.

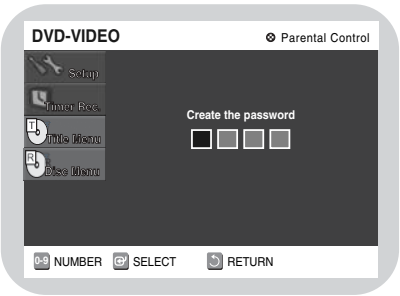
1 With the unit in Stop mode, press the MAIN MENU button on the remote.

2 Select “Setup” using ▲▼ buttons, then press the ► or ENTER button.

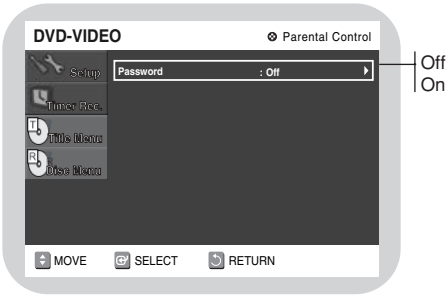
3 Select “Parental control” using ▲▼ buttons, then press the ► or ENTER button.

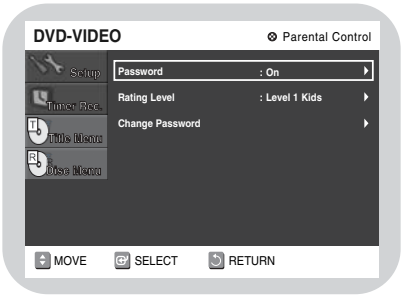


4 Enter the 4-digit password using the 0 to 9 buttons on the remote.
- When using the DVD recorder for the first time, the ‘Confirm the password.’ message will be displayed. Enter your password again.

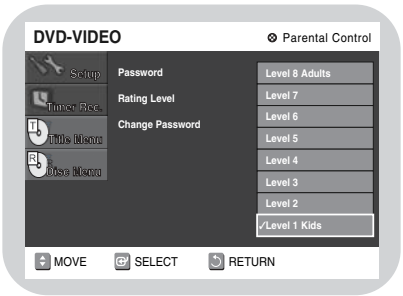


5 Select Password ON/OFF using ▲▼ buttons, then press the ► or ENTER button.





6 Select Rating Level you want using ▲▼ buttons, then press the ► or ENTER button.
- For example, if you select up to Level 6, discs that contain Level 7, 8 will not play. Larger number indicates the program is more intended for adult use only.



Note

■ Press the RETURN or ◄ button to return to the previous menu. Press the MAIN MENU button to exit the menu.

■ Refer to Troubleshooting if you have forgotten your password.

About Change in Password;

1 Select “Change Password” using ▲▼ buttons, then press the ► or ENTER button.
- The ‘Enter the password.’ message will be displayed.

2 Enter the 4-digit password using the 0 to 9 buttons on the remote.
- The ‘Confirm the password.’ message will be displayed.

3 Enter your password again using the 0 to 9 buttons on the remote.

Note

■ Press the RETURN or ◄ button to return to the previous menu. Press the MAIN MENU button to exit the menu.

Auto Channel Memory

Auto Channel Memory will automatically seek and store all active channels in your area.

1 Open “MENU”

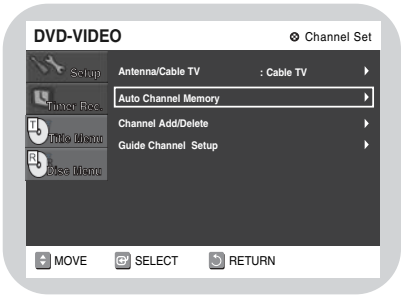
With the DVD in stop mode, press the MAIN MENU button.

2 Select “Setup”

Using the ▲▼ buttons, move the selection bar to “Setup”, then press the ► or ENTER button to select.

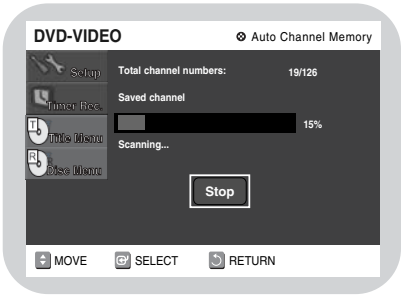
3 Select “Channel Set”

Using the ▲▼ buttons, move the selection bar to “Channel Set”, then press the ► or ENTER button to select.



4 Run “Auto channel memory”

Move the selection arrow to “Auto Channel Memory,” then press ENTER to select.
- The DVD Recorder-VCR will automatically search for all available channels in the selected Tuner Band. This procedure may take a few minutes to complete.
- When finished, the lowest channel found will be displayed.



- Press ENTER button to stop or cancel scanning.

Note

■ Press the RETURN or ◄ button to return to the previous menu. Press the MAIN MENU button to exit the menu.

Channel Add/Delete

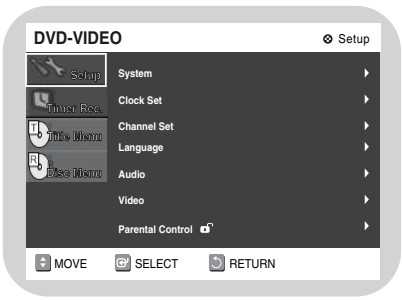
Use this feature if Auto Channel Search missed a channel that you would like to add or delete a channel you wish to remove.

1 Open "MENU"

With the DVD in stop mode, press the MAIN MENU button.

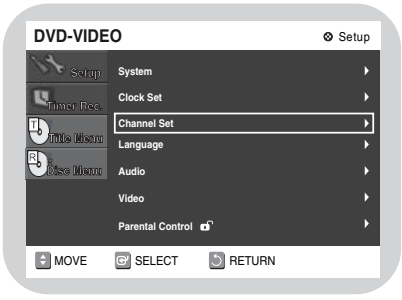
2 Select "Setup"

Using the ▲▼ buttons, move the selection bar to "Setup" then press the ► or ENTER button to select.



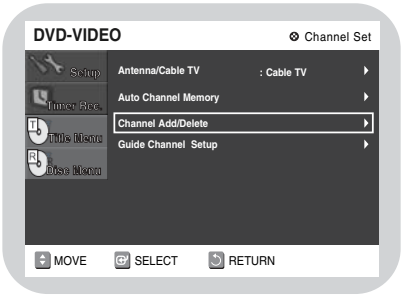
3 Select "Channel Set"

Using the ▲▼ buttons, move the selection bar to "Channel Set", then press the ► or ENTER button to select.



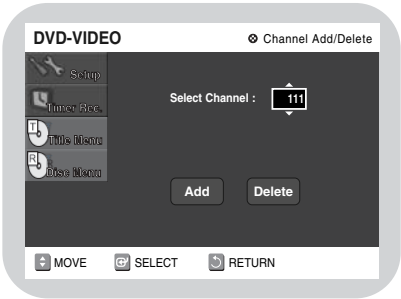
4 Select "Channel Add/Delete"

Move the selection bar to "Channel Add/Delete," then press the ► or ENTER button to select.



5 Select Channel to Add/Delete

Use the DVD CHANNEL buttons to tune in the channel number you wish to add or delete.
Use the numeric buttons to move to a channel directly.
If you use the ▲▼ button, the channel will be moved to the next memorized channel.

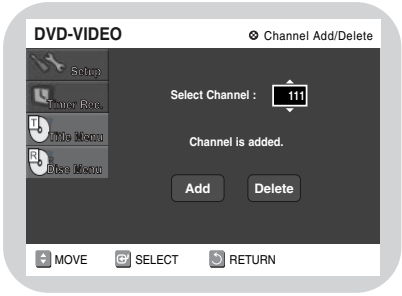


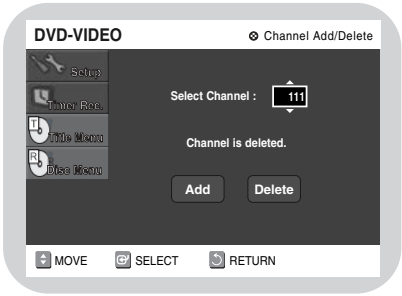
Note

■ Press the RETURN or ◄ button to return to the previous menu. Press the MAIN MENU button to exit the menu.

6 Add/Delete Channel

Press ► to move the cursor to select Add, then press ► if you want to select Delete. Press ENTER to confirm your selection.





Note

- Extended pressing of numeric button “1” will deliver “100”.
- Press the RETURN button to return to the previous menu. Press the MAIN MENU button to exit the MAIN menu.

Guide Channel Setup

Set these guide channels so you can use VCR Plus+ codes for timer recording. Before starting the settings, prepare a chart showing the channels, station names, and guide channels.

1 Open “MENU”

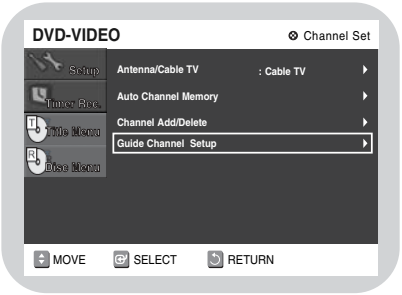
With the DVD in stop mode, press the MAIN MENU button.

2 Select “Setup”

Using the ▲▼ buttons, move the selection bar to “Setup”, then press ENTER to select.

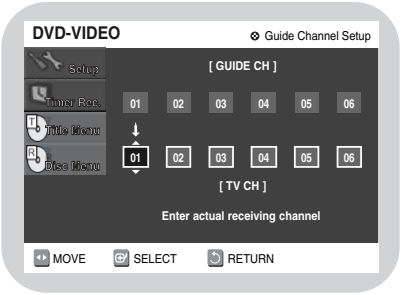
3 Select “Channel Set”

Using the ▲▼ buttons, move the selection bar to “Channel Set,” then press ENTER to select.



4 Select “Guide Channel Setup”

Move the selection bar to “Guide Channel Setup”.



5 Select the guide channel you want to set.

6 Change “TV Channel”

Using the ▲▼ buttons to select the TV channel corresponding to the guide channel and press ENTER.

• Repeat steps 5 and 6 as necessary.

Note

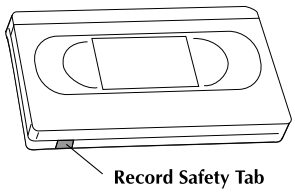
- Press the RETURN button to return to the previous menu. Press the MAIN MENU button to exit the MAIN menu.

VCR Setting

If you want your videotapes to play automatically when you insert them, turn Auto Play on.

Note

■ Only tapes that are missing the Record Safety Tab will play automatically when inserted.

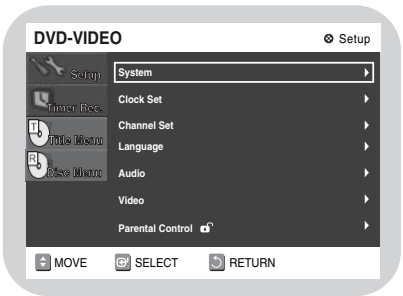


1 Open "MENU"

With the VCR in Stop or Play mode, press the MAIN MENU button.

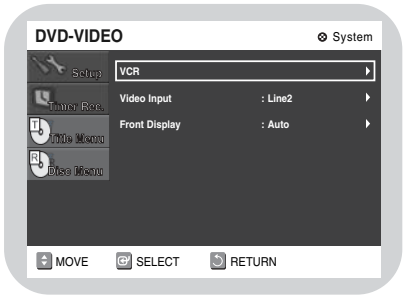
2 Select "System"

Use the ▲▼ buttons to highlight "System", then press the ► or ENTER button.



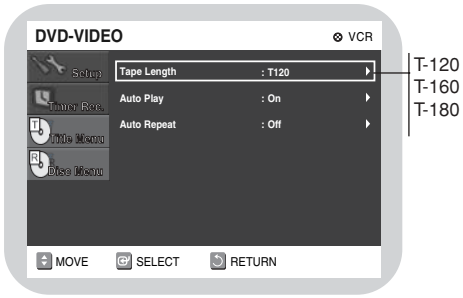
3 Select "VCR"

Using the ▲▼ buttons, move the selection bar to "VCR", then press the ► or ENTER button to select.



4 Select "Tape Length"

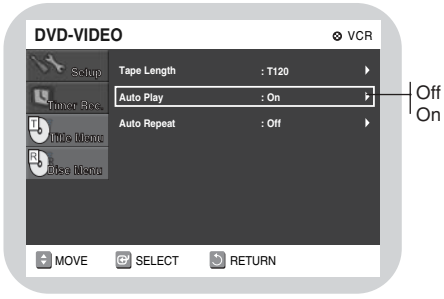
Press the ► or ENTER button to select the Tape Length. This information is usually printed on the tape box. The menu cycles through: T-120, T-160 or T-180.
Once the type of cassette is set, the VCR can display the amount of time remaining on the tape when you press the DISPLAY button.



5 Select "Auto Play"

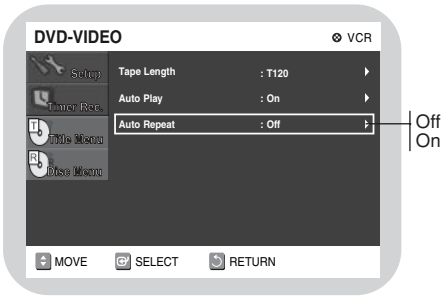
Move the selection bar to "Auto Play," then press the ► or ENTER button to select from the following options:

- On - The VCR will automatically begin playing a video tape when it is inserted, as long as the safety tab of the cassette has been removed.
- Off - Auto play is disabled.



6 Select “Auto Repeat”

Move the selection bar to “Auto Repeat”. It sets the VCR to play a tape repeatedly [unless a tape control is activated (Stop, Fast Forward or Rewind)].



Video Input

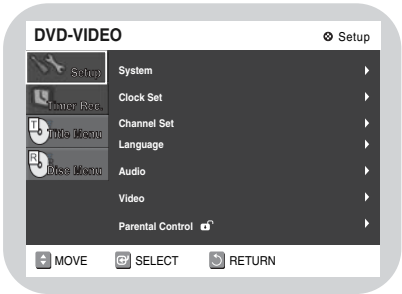
If you watch video through Line IN 2, you can choose Composite or Super (S) video.

1 Open “MENU”

With the DVD Recorder-VCR in stop or play mode, press the MAIN MENU button.

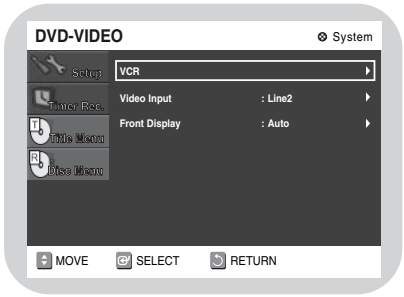
2 Select “Setup”

Using the ▲▼ buttons, move the selection bar to “Setup”, then press ENTER to select.



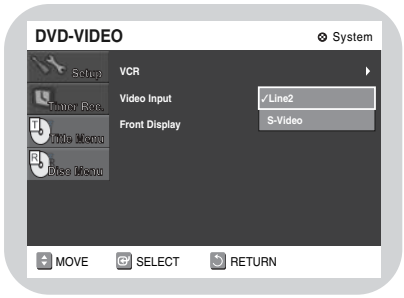
3 Select “System”

Use the ▲▼ buttons to highlight “System”, then press the ENTER button.



4 Select “Video Input”

Use the ▲▼ buttons to highlight “Video Input”, then press the ► or ENTER button and choose Line 2 (Composite) or S-Video.



Front Display

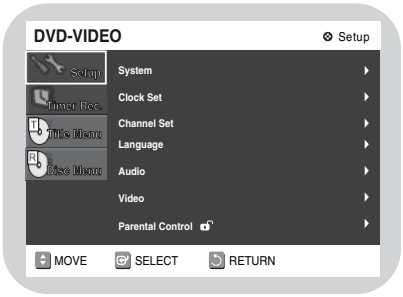
You can set the Front Panel Display to be bright all the time, dim all the time, dim during power off.

1 Open "MENU"

With the DVD in Stop or Play mode, press the MAIN MENU button.

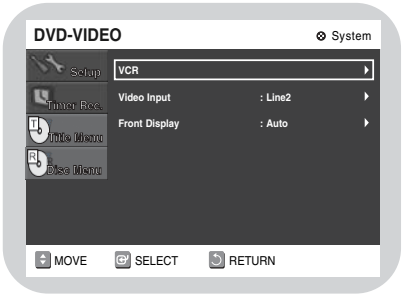
2 Select "Setup"

Using the ▲▼ buttons, move the selection bar to "Setup", then press the ► or ENTER button to select.



3 Select "System"

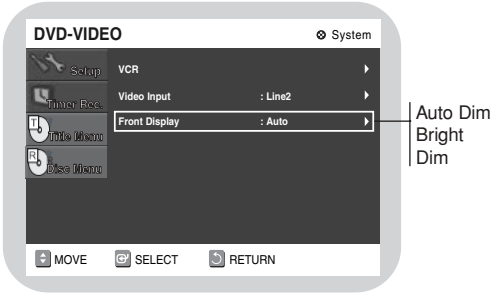
Using the ▲▼ buttons, move the selection bar to "System", then press the ► or ENTER button to select.



4 Set "Front Display"

Move the selection bar to "Front Display", then press the ► button to select from the following options:

- Auto Dim – Front Panel Display will dim automatically during power off.
- Bright – Front Panel Display will be bright all the time.
- Dim – Front Panel Display will be dim all the time.



Note

■ Press the RETURN or ◄ button to return to the previous menu. Press the MAIN MENU button to exit the menu.

Playback

This section introduces basic functions of playback by disc type.

Dolby Digital | DTS | Digital Audio

Stereo | NTSC broadcast system in U.S.A, Canada, etc. | MP3

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Before Playing

Preliminary

Read the following information before playing a disc.

Region code (DVD-Video only)

Both the DVD Recorder-VCR and the discs are coded by region. These regional codes must match in order for the disc to play. If the codes do not match, the disc will not play. The Region Number for this DVD Recorder-VCR is described on the rear panel of the DVD Recorder-VCR.

Disc types that can be played

Disc Type	Disc Logo	Recorded content	Disc Shape	Max. Playing Time (min)
DVD-VIDEO	DVD VIDEO	AUDIO+ VIDEO	Single sided (5")	about 240
			Double sided (5")	about 480
			Single sided (3.5")	about 80
			Double sided (3.5")	about 160
AUDIO-CD	COMPACT disc DIGITAL AUDIO	AUDIO	Single sided (5")	about 74
			Single sided (3.5")	about 20
JPEG CD-R/RW		JPEG Images	Single sided (5")	—
			Single sided (3.5")	—
MP3 CD-R/RW		MP3 Audio	Single sided (5")	—
			Single sided (3.5")	—
DVD-RAM	DVD RAM	AUDIO + VIDEO	Single-sided (5") (4.7GB)	1(XP: Excellent Quality)
				2 (SP: Standard Quality)
				4 (LP: Long Playback)
				6 (EP: Extended Playback)
			Double-sided (5") (9.4GB)	2 (XP: Excellent Quality)
				4 (SP: Standard Quality)
				8 (LP: Long Playback)
				12(EP: Extended Playback)
DVD-RW	DVD RW	AUDIO + VIDEO	5" (4.7GB)	1 (XP: Excellent Quality)
				2 (SP: Standard Quality)
				4 (LP: Long Playback)
				6 (EP: Extended Playback)
DVD-R	DVD R	AUDIO + VIDEO	5" (4.7GB)	1 (XP: Excellent Quality)
				2 (SP: Standard Quality)
				4 (LP: Long Playback)
				6 (EP: Extended Playback)

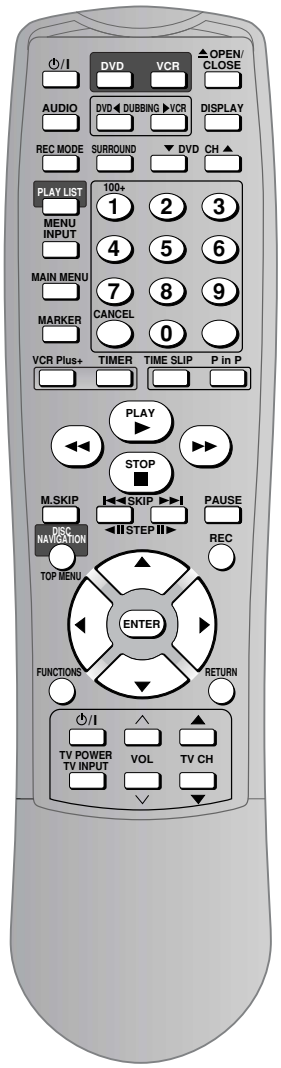
Discs that cannot be played

- DVD-Video with a region number other than “1” or “ALL”
- 3.9 GB DVD-R Disc for Authoring
- DVD-RAM not recorded following the Video Recording Standard
- Unfinalized DVD-R recorded on other equipment
- PAL discs
- DVD-ROM/DVD+RW/PD/MV-Disc/DiVX Video Disc, etc.
- Video CD/CVD/SVCD/CD-ROM/CDV/CD-G/CD-I

Note

- This DVD Recorder-VCR can only operate with discs that are compatible with DVD-RAM Standard Version 2.0.
- Playback and/or recording may not work for some types of discs, or when specific operations, such as angle change and aspect ratio adjustment, are being performed. Information about the discs is written in detail on the box. Please refer to this if necessary.
- Do not allow the disc to become dirty or scratched. Finger prints, dirt, dust, scratches or deposits of cigarette smoke on the recording surface may make it impossible to use the disc for recording.
- To protect a DVD-RAM disc from damage, use a cartridge.
- DVD-RAM/R/RW discs may not be able to play on some DVD players, depending on the player, disc and the condition of the recording.
- Discs with PAL programs recorded on them cannot be played using this product.

Playing a Disc



Note

■ This DVD Recorder-VCR can play back 8-cm DVD-R discs that have been recorded on a Hitachi DVD video camera/recorder and not finalized. However, no image can be recorded on these discs.

1 Press the OPEN/CLOSE button.

2 Place a disc gently into the tray with the disc's label facing up.

3 Press OPEN/CLOSE button to close the disc tray.

- The DVD Recorder closes the disc tray and plays the disc automatically.
- When a recordable media (DVD-RAM, DVD-RW, DVD-R, etc.) is used, Auto Playback cannot be activated without pressing the PLAY button. When pressing the POWER button while a disc is in the tray, the unit will be activated. Press PLAY button to start playback.
- If you insert an MP3 Disc, the DVD Recorder-VCR will display the file list on the screen and start playback.
- When a JPEG disc is inserted, folders and a file list are displayed in the Album format.

4 Press the STOP button to stop playback.

- Pressing the PAUSE button will temporarily stop playback.

Note

■ When you stop disc play, the recorder remembers where you stopped, so when you press PLAY button again, it will pick up where you left off (unless the disc is removed, the recorder is unplugged, or the STOP button is pressed twice.) This function is only applicable to DVD-VIDEO, DVD-RAM, DVD-RW, DVD-R or audio CDs (CD-DA).

CAUTION

■ Do not move your DVD Recorder-VCR while playing, as this may cause damage to the disc.
■ Make sure to press the OPEN/CLOSE button to open or close the disc tray.
■ Do not push the disc tray while it is being opened or closed, as this may cause a product malfunction.
■ Do not place foreign materials on or in the disc tray.
■ Some functions may be performed differently or be disabled depending on the disc type. If this occurs, refer to the instructions written on the disc case.
■ Be especially careful that children's fingers are not caught between the disc tray and the tray chassis when it closes.
■ After turning power on, it will take a few seconds until the DVD operates.

Using the Search & Skip Functions

Searching through a Chapter or Track

During play, press the SEARCH ◀◀ or ▶▶ button on the remote control. The playback speed will change as follows.

DVD-VIDEO/ DVD-RAM/DVD-RW DVD-R	PLAY→FF1/FR1→FF2/FR2→ FF3/FR3→FF4/FR4→FF5/FR5→ FF6/FR6
AUDIO CD(CDDA)	PLAY→FF1/FR1→FF2/FR2→ FF3/FR3

• You can scan the program in reverse order.
To return to normal speed playback, press the ▶ button.

Skipping Chapters or Tracks

During play, press the |◀◀ or ▶▶| button on the remote control.

• **If you press the |◀◀ button**
If you press the |◀◀ button, it moves to the beginning of the chapter or track. Pressing the button once again within 3 seconds returns to the beginning of the previous chapter or track.

• **If you press the ▶▶| button**
If you press the ▶▶| button, it moves to the next chapter or track.

Slow Motion Play/ Step Motion Play

Slow Motion Play (DVD-VIDEO/DVD-RAM/DVD RW/ DVD-R)

During pause mode, press the SEARCH ◀◀ or ▶▶ button on the remote.

• Each time you press the ▶▶ button :
▶▶ Slow X 1/8 → ▶▶ Slow X 1/4 → ▶▶ Slow X 1/2

• Each time you press the ◀◀ button :
◀◀ Slow X 1/8 ◀◀ Slow X 1/4 → ◀◀ Slow X 1/2 → (◀) , ▶

To return to normal speed playback, press the ▶ button.

Step Motion Play (DVD-VIDEO/DVD-RAM/ DVD-RW/ DVD-R)

During pause mode, press the ◀❚❚ or ❚❚▶ button on the remote.

• Each time the button is pressed, a new frame will appear.

To return to normal speed playback, press the ▶ button.

Note

■ No sound is heard during STEP or SLOW mode.

Manual Skip

Skipping 30 seconds forward and playing (manual skip):

Each press of the M. SKIP button during playback of recorded TV program will skip to scene approx. 30 seconds ahead.

1 Press the M. SKIP button on remote control during playback.

Note

- Manual Skip can be performed only during normal playback.
- When the time set is less than a remaining time of a current title: The next title is played from the beginning.
- When the time set is less than a remaining time of a play list, the next scene is played.
- Manual Skip is not performed with respect to a still picture.
- When a set time is less than a remaining of a scene, a last title, or a last track that is displayed currently, a prohibition mark appears.
- When the time set is less than the remaining time of the currently displayed track, title or scene, a prohibition mark appears.
- Manual Skip release Repeat (including Repeat A-B, Chapter, and Title).
- This may not operate with some DVD-Video discs.

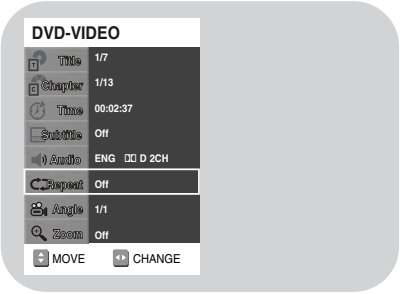
About FUNCTIONS button

The FUNCTIONS button allows you to easily search for a desired scene by accessing title, chapter, track and time. You can also change the subtitle and audio settings and set some features including Repeat, Angle and Zoom.

Press the FUNCTIONS button on the remote control during playback.

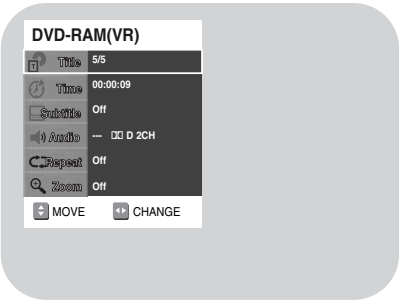
DVD-VIDEO

Title/Chapter/Time/Subtitle/Audio/Repeat/Angle/Zoom



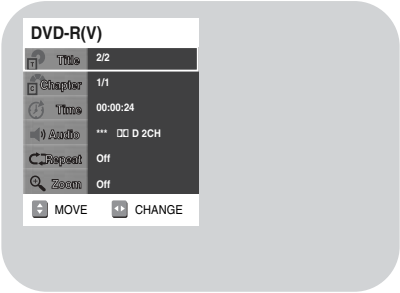
DVD-RAM/DVD-RW

Title/Time/Subtitle/Audio/Repeat/Zoom



DVD-R

Title/Chapter/Time/Audio/Repeat/Zoom



Note

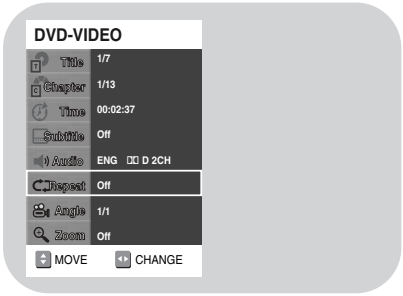
- **What's a track?**
  A track is usually a song on a Audio CD (CDDA) or MP3 disc.
- **What's a chapter?**
  A title on a DVD disc is usually divided into chapters.
- **What's a title?**
  A title means usually a film contained on a DVD disc.
- This may not work for some discs. When an audio CD (CD-DA) or an MP3 disc is inserted, depending on the type, the information display may not appear.
- Regarding the DVD-Video mode, the Time Search function does not operate in some discs.
- To make the screen disappear, press the FUNCTIONS button again.

Repeat Play

Using Repeat Play (For DVD-VIDEO/DVD-RAM/DVD-RW/DVD-R)

(DVD-VIDEO only supports chapter repeat.)

1 Press the FUNCTIONS button during playback.



2 Use ▲▼ buttons to select Repeat and use ► button to select the Title, Chapter or A-B you want to play repeatedly.

3 Press the ENTER button.
Repeat play allows you to repeat title, chapter or A-B.
• To make the screen disappear, press the FUNCTIONS or RETURN button.

Using Repeat Play (For Audio CD/MP3)

1 Press the FUNCTIONS button during playback.
Repeat is highlighted.

2 Press the ENTER button.

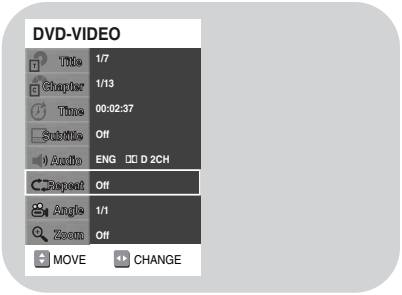
3 Press the ▲▼ button to select the Track or Disc you want to playback repeatedly. For MP3 discs, you can select Track, Folder or Disc.

4 Press the ENTER button.
Repeat play allows you to repeat a track, folder or the entire disc.

Using the A-B Repeat Function

For DVD-VIDEO/DVD-RAM/ DVD-RW/DVD-R

1 Press the FUNCTIONS button during playback.



2 Use ▲▼ to select Repeat and use ► button to select A-B.

3 Press the ENTER button.

4 Press the ENTER button at the point where you want the repeat play to start (A) and then press the ENTER button at the point where you want the repeat play to stop (B).

- The DVD Recorder-VCR will play back the selected section repeatedly.

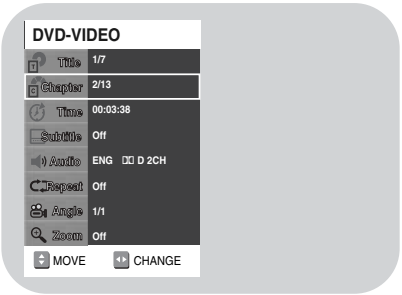
To return to normal playback

Select Off on the Repeat item or press the CANCEL button on the remote control.

Moving to a Scene Directly

You can find the desired scene easily using the FUNCTIONS button.

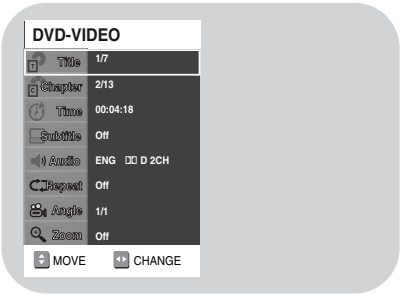
1 Press the FUNCTIONS button during playback.



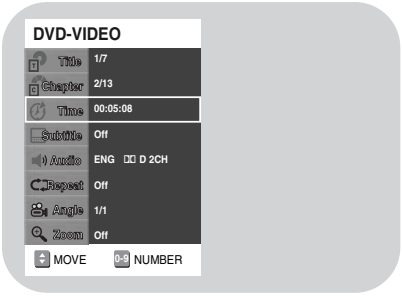
2 Use ▲▼ to select the Title, Chapter or time you want to find the desired scene.

3 If you want to select a title or chapter, select it using the ◄► buttons, then press the ENTER button.

- You can directly enter the desired item by using the numeric buttons.



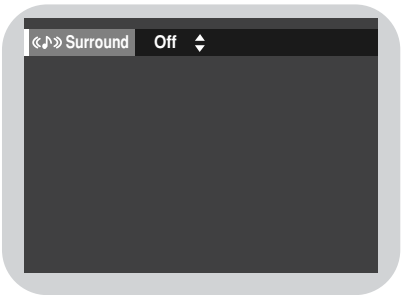
4 If you want to move to a desired time, enter the time in the sequence of hour, minute, and second using the numeric buttons and then press the ENTER button.



Virtual Surround

This function allows you to enjoy surround-sound effect even with only two front speakers (L/R).

1 Press the SURROUND button during playback.



2 Press the SURROUND button to switch between On and Off.
- Press the RETURN button to switch off the display. (The display will automatically disappear in approx. 30 seconds if the DVD recorder is left without any button pressed.)

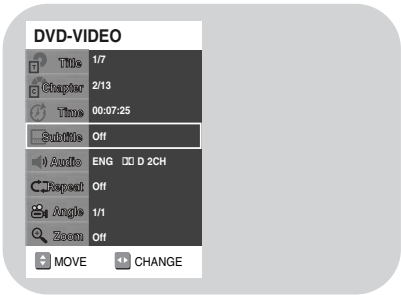
Note
- Virtual Surround may be less effective or may not function at all depending on the disc used.
- If the sound is distorted, switch the Surround setting off.

Selecting the Subtitle & Audio Language

Audio languages or subtitle languages may not work depending on disc type.
It is available during playback only.

Selecting the subtitle language

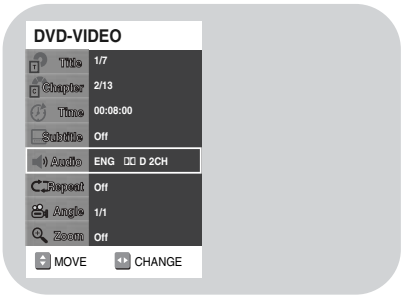
1 Press the FUNCTIONS button during playback.



2 Use ▲▼ button to select Subtitle and use ◄► button to select the desired subtitle language.
- If a disc contains subtitles, you can select a desired subtitle language by pressing the ◄► buttons.
- Subtitle display may be different depending on disc type.
- DVD subtitles may overlap with your TVs subtitles. If this occurs, disable the caption function on your TV.
- Some discs allow you to select languages from the disc menu only.

Selecting the Audio language

1 Press the FUNCTIONS button during playback.



2 Use ▲▼ to select Audio and use ◄► button to select the desired audio language.

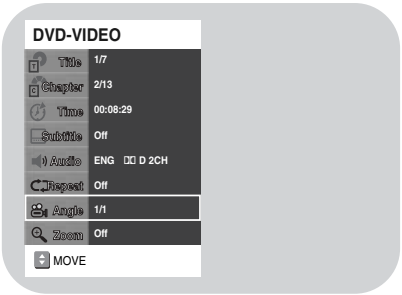
- Audio languages may be different because they are disc-specific.
- Some discs allow you to select languages from the disc menu only.

Changing the Camera Angle

When a DVD contains multiple angles of a particular scene, you can select the Angle function.

1 Press the FUNCTIONS button during playback.

2 Use ▲▼ to select Angle and use ◄► button to select the desired camera angle.



Note

■ This function is disc-dependent, and may not work with all DVDs. This function does not work when a DVD has not been recorded with a multi-camera angle system.

Using Markers / Bookmarks

DVD-RAM DVD-R RW VIDEO RW VR DVD VIDEO

Set marks at scenes you want to see again so that you can start playback from the marked position.

Setting a marker

1 Press the MARKER button during playback.

2 Press the ENTER button when the desired scene appears.
- The number 1 is displayed and the scene is memorized.

3 Press ► button to move to the next position.

4 Press the ENTER button again when the desired scene appears.
- The number 2 is displayed and the scene is memorized. Repeat above to mark other positions. You can mark up to 99 scenes.
- The set markers will be recorded on disc.
- To finish marker setting, press the RETURN or MARKER button.
- No marker can be set during playback of playlist, or when disc protect or cartridge protect has been set.

Marking with DVD-R, DVD-RW(VIDEO) and DVD-VIDEO discs

- The screen will display “Bookmark” in place of “Marker” if you are playing a DVD-R, DVD-RW(VIDEO) and DVD-VIDEO.
- Up to 10 scenes can be marked.
- Removing disc will delete all bookmarks.

Note

■ The marker or bookmark numbers are attached in the order of time elapsed. If new marker or bookmark is added or the existing one is deleted, a drift will occur between the numbers and marked scenes.

■ Pressing the |◄◄ or ►►| SKIP button during playback will also skip to the marked scene.

Playing Back a Marker

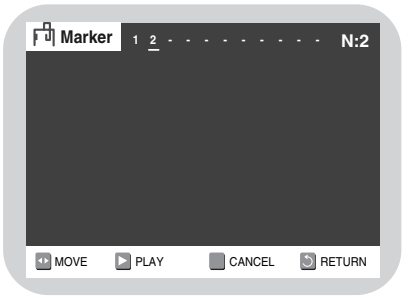
1 Press the MARKER button during playback.

2 Press the ◄► buttons to select a marked scene.

3 Press the ENTER button to start playing from the selected scene.

Canceling a Marker

1 Press the MARKER button



2 Press ◀▶ buttons to select a marked scene you want to delete.

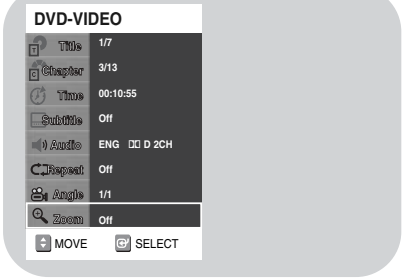
3 Press the CANCEL button to delete the selected marker.

Note

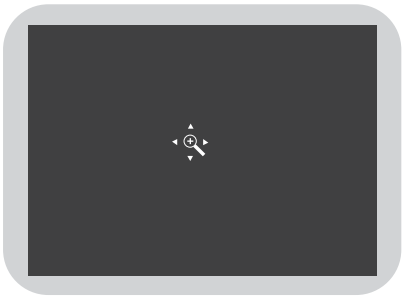
■ When using a DVD-RAM/DVD-RW(VR) the last Marker number added will be deleted.

Zooming-In

1 Press the FUNCTIONS button during playback.



2 Use ▲▼ buttons to select Zoom, and then press the ENTER button.
- will be displayed.



3 Press ▲▼◀▶ buttons to move to the area you want to enlarge.

4 Press the ENTER button.
- The screen will be enlarged to twice the normal size.
- If you press the ENTER button again after the screen was enlarged to twice the normal size, the screen size will be enlarged to four times the normal size.

DVD-VIDEO/ DVD-RAM/DVD-RW/ DVD-R	normal size →2X →4X →2X →normal size

5 To return to the normal size, press the ENTER button repeatedly until the screen becomes of normal size.

Check Remaining Time

1 Press the DISPLAY button on the remote control. The following information will be displayed. (Current deck status, recording speed, remaining time, input channel, current time.)

Using the Disc and Title Menu

Some type of discs contains a dedicated menu system that allows you to select special functions for title, chapter, audio track, subtitle, film preview, information on characters, etc.

For DVD-VIDEO disc

1 Press the TOP MENU/DISC NAVIGATION or MENU/PLAY LIST button to enter the disc menu of the disc.
- Move to the setup menu related to playback operation.
- You can select audio language and subtitle etc. provided by the disc.
- Depending on the disc type, either the TOP MENU/DISC NAVIGATION or MENU/PLAY LIST button (not both) can be used.

2 Use the ▲▼ buttons to choose a desired title, and then press the ENTER button.

Note

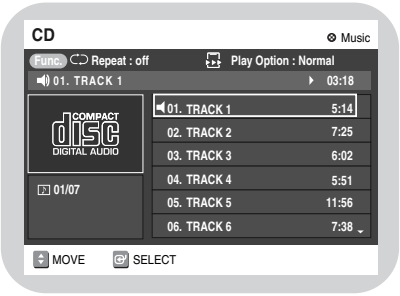
■ Some discs may not support the title menu functionality.

Playing Back an Audio CD (CDDA)

Each disc has a variety of menu functions available.

1 Insert an audio CD (CDDA) into the disc tray.

- The audio CD menu appears and the tracks (songs) are played back.



2 Press the ▲▼ buttons to select the track (song) to start playback from, and then press the ENTER button.

- You can also select the track (song) by pressing the numeric buttons on the remote.

Audio CD (CDDA) Screen Elements

1 ▲▼: Select a track (song).

2 ►: Play back the selected track (song).

3 ENTER button: Play back the selected track (song).

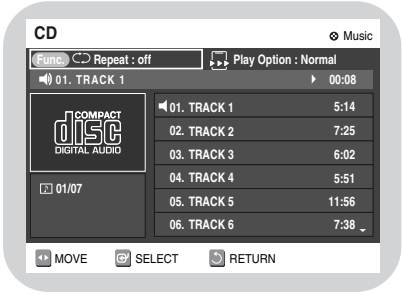
4 ►►| button: Play back the next track.

5 |◄◄ button: Returns to the beginning of the current track when pressed during playback. If you press this button within three seconds after playback starts, the previous track will be played. If you press this button after three seconds, the current track will be replayed from the beginning.

6 Press and hold the ◄◄/►► button: Fast Play (FF1/FR1, FF2/FR2, FF3/FR3)

Play Option Mode

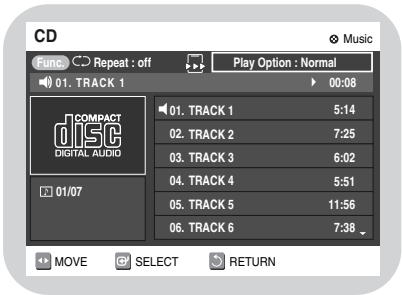
1 Press the FUNCTIONS button during playback. Repeat mode will be highlighted.



- During Playback, repeat mode will be highlighted.
- During Stop, Play option will be highlighted.

2 Select "Play Option Mode" using the ◀▶ buttons and press the ENTER button.

- The play option screen will appear.



3 Select a desired play option using the ▲▼ buttons and press the ENTER button.

- **Normal** : Tracks on a disc are played in the order in which they were recorded on the disc.
- **Random** : The Random option plays a disc's tracks in random order. After a random list is generated and played completely, another random list is generated and played.
  Random Play will continue until the play option is changed.
- **Intro** : The first 10 seconds of each track is played. If you press the ▶ button during Intro play, Normal Play will be performed from the track currently playing. When Intro Play is completed, Normal Play is performed.
- **Playlist** : The Playlist playback option allows you to select the order in which you want tracks to play.

Note

■ The same can be used with a MP3 disc.

To change repeat mode

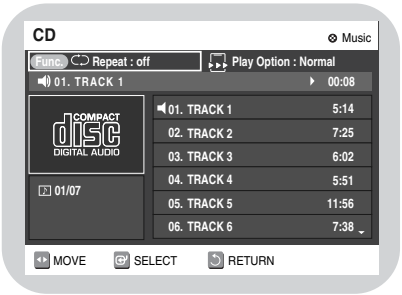
1 Press FUNCTIONS during Play to highlight Repeat Mode. Press ENTER when Repeat Mode is highlighted.

- A screen allowing you to change the repeat mode (Off, Disc, Track) will appear.

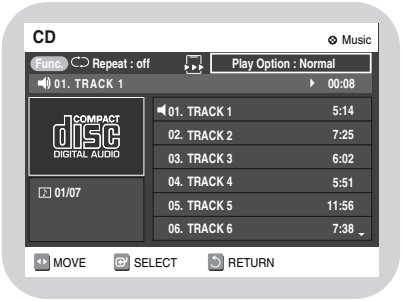
To Program Tracks

You can register a maximum 30 tracks in the playlist.

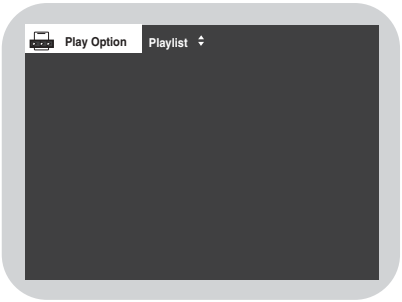
1 Press the FUNCTIONS button.
Repeat Mode will be highlighted.



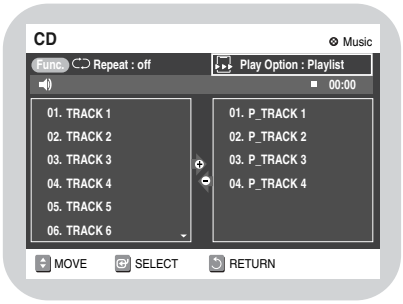
2 Select Play Option using the ◀▶ buttons.



3 Press the ENTER button.
The play option screen will appear.
Select Playlist using the ▲▼ buttons.



4 Press the ENTER button.
The Playlist screen will appear.
Select tracks in the order in which you want them to play using the ▲▼ buttons. Press the ENTER button.



Press the PLAY button to playback playlist.

5 If you playlisted a wrong track, select the wrong track using the ▲▼ buttons and press the CANCEL button.
The wrong track will be removed.

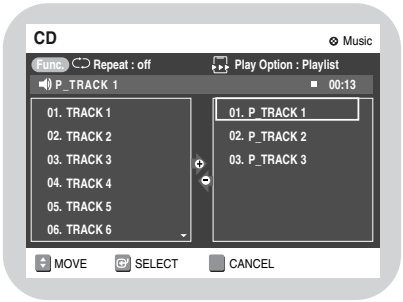
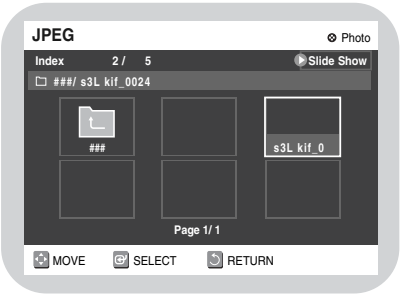


Photo CD Playback

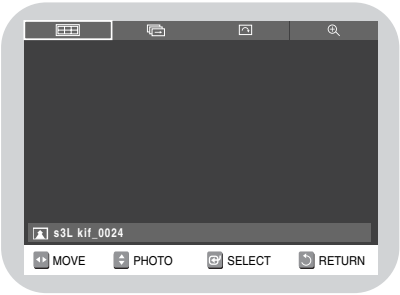
1 Insert a photo CD (JPEG) into the disc tray.

2 The screen shown below will appear automatically. (Press the PLAY button to switch to slide show mode.)



To see the next 6 pictures, press the ▶▶| button.
To see the previous 6 pictures, press the |◀◀ button.

3 Select Photo using the ▲▼ buttons, then press the ENTER button.



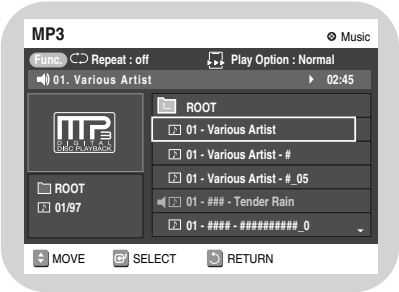
4 Use the ◀▶ buttons to select clips menu and then press the ENTER button.

- : Returns to the Album screen.
- : The unit enters slide show mode. Before the slide show can begin, the photo interval (slide show speed) must be set
- : Each time the ENTER button is pressed the picture rotates 90 degree clockwise.
- : Each time the ENTER button is pressed, the photo is enlarged up to 4X. (Normal →2X →4X →2X →Normal)

Playing back an MP3 CD

1 Insert an MP3 CD into the disc tray.

• The MP3 menu is displayed and the tracks (songs) are played back.



2 Press the ▲▼ buttons to select the folder you want to hear, and then press the ENTER button.

• Press the ▲▼ buttons to select the track (song) you want to hear, and then press the ENTER button.

• You can also select the desired track (song) by pressing the numeric buttons on the remote.

Buttons on the Remote

1 ▲▼: Selects a track (song).

2 ►: Plays the selected track (song).

3 ENTER button:
Plays the selected track (song) or displays the files in the selected folder.

4 RETURN button:
Moves to the folder to which the current song belongs.

5 ►►| button: Plays the next track.

6 |◄◄ button: Returns to the beginning of the current track when it is pressed during playback. If it is pressed again, the DVD Recorder-VCR plays back the previous track.

Note

■ The same playback function can be used for music CDs.

Using P in P

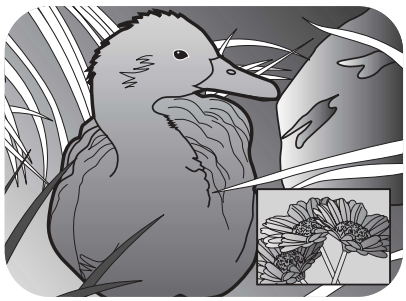
The P in P function allows you to view a sub screen together with the main screen in DVD mode.
You can watch both DVD and TV together.

Note

■ P in P does not work in VCR mode.

1 Press the P in P button during playback of DVD disc.

• The current disc is played back on the P in P screen located at the bottom of the screen.



Switching between the P in P and main screens

1 Press the P in P button again.

• The main and P in P screens will be switched.

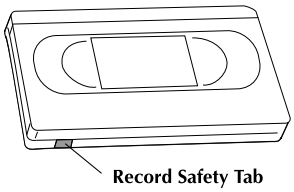
Deactivating P in P

1 Press the P in P button again.

• P in P will be deactivated.

Playing the VCR

To play a standard VHS videotape, just insert it into the VCR deck and press the PLAY button. You can turn on the Auto Play to enable the VCR deck to play automatically when you insert a videotape that is missing the Record Safety Tab. See pages 35~36.



1 Insert VHS Tape

Insert a standard VHS videotape into the VCR deck.
- When a videotape is inserted, power will turn on automatically.

2 Play Tape

Press the PLAY button on the remote control or on the front panel of the unit. The videotape will begin to play automatically if it is missing the Record Safety Tab and Auto Play is turned on. See pages 35~36.

3 Stop Playback

Press the STOP button on the remote control or on the front panel of the unit.

Note

■ Press the DVD/VCR button on DVD Recorder-VCR, or press the VCR button on remote control to choose “VCR”: “VCR” will appear in the display.

Tracking

The Tracking adjustment removes the white lines that sometimes appear during playback because of slight differences in recording decks. The DVD CHANNEL buttons will automatically align the recorded tracks with the playback heads to solve this problem. You may also set tracking manually.

1 Adjust Tracking Manually

During playback, press the DVD CHANNEL ∧/∨ buttons to remove white lines from the picture.

Special VCR Playback Features

While a videotape is playing, you can enjoy a variety of special playback features, including Still, Frame Advance, Search, Slow motion, etc. Press the PLAY button again to resume normal playback.

1 Pause

In Play mode, press PAUSE button to still a single frame.

2 Frame Advance

In the pause mode, press ▶▶| SKIP button to advance to the next frame.

3 Fps/Review

In the playback mode, press the ▶▶ forward or ◀◀ reverse button: You can search for a scene on tape at a speed that can be switched in four steps.

Hold down ▶▶ to play at a speed seven times the normal.

- Release the button to restore normal playback.
- The FF/SKIP button on the DVD Recorder-VCR will work the same.

Each press of ▶▶ will switch the speed as follows:

2X → 3X → 5X → 7X

- The FF/SKIP button on the DVD Recorder-VCR will deliver only the 5X speed.

Each press of ◀◀ will switch the speed as follows:

→Reverse play (1X) → 3X rewind → 5X rewind → 7X rewind

- Press the PLAY button to restore normal playback.
- The SKIP/FR button on the DVD Recorder-VCR will deliver only the 5X speed.

Note

- Pressing the DISPLAY button will display the current VCR status (counter, record mode, remaining tape) on the screen.
- Visual search can operate only during playback.
- Noise appears on playback picture during visual search, but this does not indicate a fault.
- When visual search is started or normal playback is restored, the picture may be distorted momentarily, but this does not indicate a fault.

4 Slow motion

In pause mode, press the ▶▶ button for slow motion. Press the ▶▶ button repeatedly to vary slow motion speed from 1/5 to 1/30 of normal playback. Press the PLAY button twice to resume normal viewing.

S-VHS Playback

The DVD Recorder-VCR allows you to playback high quality S-VHS tapes.

1 Insert S-VHS Tape

Insert an S-VHS tape into the VCR deck.

2 Start Playback

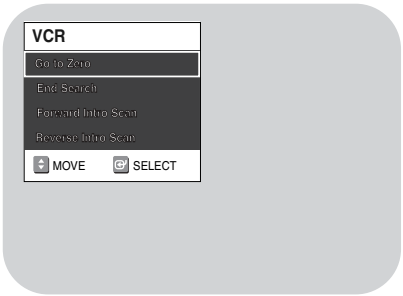
Press PLAY button on the remote control to begin playback of the S-VHS tape.

Variable Search System

Press the FUNCTIONS button to display the search screen in the stop or playback mode. When a program is recorded, the starting point is given an Index mark for easy location. However, the VHS Index Search System (VISS) cannot recognize index marks made by old VCRs. If the VCR has trouble finding a mark, it is probably because the cassette was recorded on a VCR without VISS. If you want to index two programs in a row, set your VCR to stop, then start recording each program.

1 Go to [0:00:00] stop

Use this feature when you want to search for the [0:00:00] counter position on a cassette. Press the CANCEL button at the point on the tape where you want to set the counter to [0:00:00].
With the VCR in the stop or playback mode, press the FUNCTIONS button. The VCR will rewind or fast forward, searching for the [0:00:00] counter position, and then automatically stop at that position.



2 End search

Use this feature when you want to search for a blank position to record a program on a cassette. With the VCR in the stop or playback mode, press the FUNCTIONS button. The VCR will fast forward, searching for a blank position, and then automatically stop at that position. If the VCR reaches the end of the tape during end search, the tape will be ejected.

3 Scan and play

Use scan and play when you don't know exactly where a program is located on a cassette tape.

- **Forward Intro Scan**
  Highlight "Forward Intro Scan", then press the ENTER button.
- **Reverse Intro Scan**
  Highlight "Reverse Intro Scan", then press the ENTER button.
  When the program you want to watch appears, press the PLAY button.

Recording

This section shows various DVD and VCR recording methods.

- *Before Recording 60*
- *Using VCR Plus+ codes to make timer recordings 62*
- *Recording the current channel you are watching 63*
- *Marking One Touch Recording (OTR) 64*
- *Making a Timer Recording 64*
- *Editing Timer Record List 66*
- *Deleting a Timer Recording Entry 67*
- *Satellite Link Recording 68*
- *Watching the Images Being Recorded (Time Slip) 69*
- *Recording From External Devices 69*
- *Playing while Recording (Chasing Play) 70*
- *Recording through DV jack 71*
- *Basic VCR Recording 71*
- *Special Recording Features 72*
- *Record Speed 72*
- *Dubbing to DVD or VCR 73*

Before Recording

Preliminary

This unit can record on various types of discs. Before recording, read the following instructions and select the disc type according to your preference.

Recordable discs

This recorder can record on the following discs.

DVD-RAM	DVD-RW	DVD-R
DVD RAM	DVD RW	DVD R

- DVD-RWs and DVD-RAMs are rewritable.
- DVD-Rs are non-rewritable.

Note

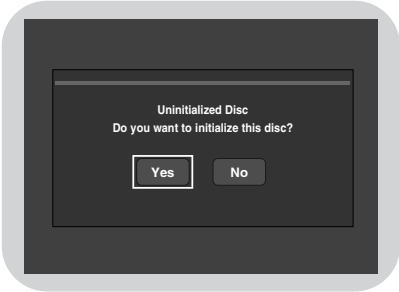
■ Finalize
- This closes the DVD-R/RW so no additional recording can be done.

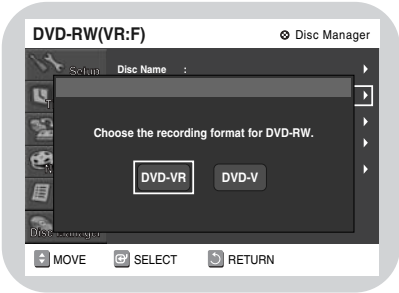
■ Unfinalize
- This allows additional recording on a finalized DVD-RW disc.
- A DVD-RW disc that has been recorded in Video Mode of a different maker's recorder cannot be unfinalized.
- A DVD-R disc cannot be unfinalized.

Recording Format

When you insert an unused disc, the following message appears. Since available functions differ depending on the disc type, select a disc that best fits your preferences.

DVD-RW: When unused DVD-RW disc is first inserted, the message "Do you want to intialize this disc" will be displayed. If you select Yes, the disc will be formatted in Video mode. If you want to change the mode, refer to Formatting a Disc on page 95.





DVD-R: Formatting DVD is unnecessary and only Video Mode Recording is supported.

DVD-RW (Video mode)/-R

- This mode automatically creates chapters at specified intervals during finalization.
- Simple editing (erasing titles/changing title name).

DVD-RW (VR mode)/-RAM

- This mode involves multiple editing functions (such as deletion of a whole title, partial deletion of a title, etc.).
- Various editing options using a created Playlist.

Unrecordable pictures

Pictures with copy protection cannot be recorded on this DVD Recorder-VCR.
When the DVD Recorder-VCR receives a copy guard signal while recording, recording stops and the message appears on the screen.

Concerning copy control signals.

Broadcasts that contain copy control signals may have one of the following three signal types: Copy-Free, Copy-Once and Copy-Never. If you want to record a copy-once type program, use DVD-RW with CPRM in VR Mode or DVD-RAM.

	Copy-Free	Copy-Once	Copy-Never
DVD-RW (Ver.1.1)	0	–	
DVD-RW (Ver.1.1) with CPRM			
VR mode	0	0*	
Video mode	0	–	
DVD-R (Ver.2.0)	0	–	
DVD-RAM	0	0	

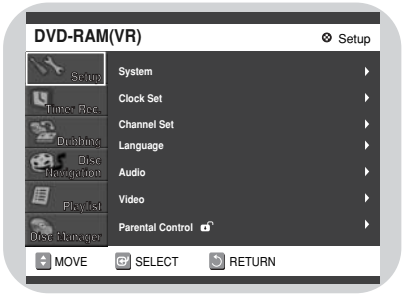
Once “Copy Once” has been recorded, additional copying cannot be performed.

Using VCR Plus+ codes to make timer recordings

DVD-RAM DVD-RW DVD-R

Entering VCR Plus+ codes is an easy way of programming the unit for recording. You can find these codes in TV Guides and magazines.

1 Press the MAIN MENU button.

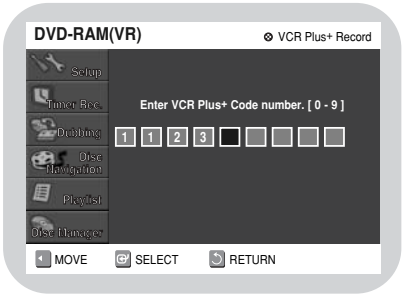


2 Press the ▲▼ buttons to select Timer Rec., and then press the ENTER or the ► button.

3 Press the ▲▼ buttons to select VCR Plus+ Record and then press the ENTER or the ► button.

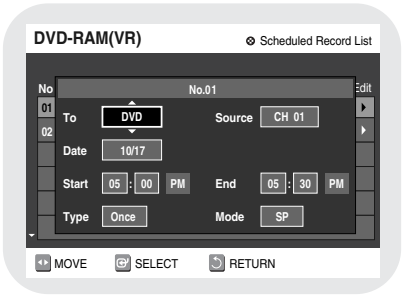
4 You can enter the VCR Plus+ code directly using the numeric buttons.

- Press the ◄ button to move back to correct a digit.



5 Press the ENTER button.

- The Timer Record Input items are displayed.

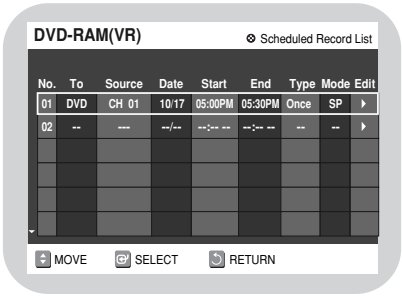


6 Confirm the program and make corrections if necessary using the ▲▼◄► buttons and then press the ENTER button.

- You can directly enter it using the numeric buttons.

7 Press the MAIN MENU button.

- "(◷)" lights on the unit's display.
- The timer can be preset whether the DVD Recorder-VCR is on or off.


DVD-RAM(VR)
Scheduled Record List
No. To Source Date Start End Type Mode Edit
01 DVD CH 01 10/17 05:00PM 05:30PM Once SP
02 -- --- --/-- --:-- -- --:-- -- -- --
MOVE
SELECT
RETURN

Note

- If you press the VCR Plus+ button on the remote in Stop mode, the current screen directly changes into the VCR Plus+ code input screen.
- Depending on the disc type, the screen shown above may look different.
- The actual time recorded may be longer than the program itself when television programs are recorded using VCR Plus+.
- The maximum number of programs that can be preset for the timer is 12.

Recording the current channel you are watching

DVD-RAM DVD-RW DVD-R

Preliminary

1. Check the antenna cable is connected.
2. Check the remaining time of disc.
DVD-RAM/DVD-RW/DVD-R discs should be formatted in advance before beginning recording. Most new discs are sold unformatted. Make sure to format your unformatted discs before recording.

1 Press the OPEN/CLOSE button and place a recordable disc on the disc tray.

2 Press the DVD CHANNEL ▲▼ button to select the channel you want to record.

3 Press the REC MODE button on remote control, to select the recording speed (quality).
• XP (High, approx. 1 hour) → SP (Standard, approx. 2 hours) → LP (Low, approx. 4 hours) → EP (Extended Play, approx 6 hours)

4 Press the REC button.

5 Press the STOP button to stop or finish a recording in progress.
• The message "Updating the information of disc. Please wait for a moment".

Pausing / Resuming

• Press the PAUSE button to pause a recording in progress.
• Press the PAUSE button again during pause to resume recording.

Note

- You can't change the recording mode and channel during recording.
- Recording will stop automatically if there is not enough space for recording.
- Up to 99 titles can be recorded onto a disc.
- If the power is interrupted due to a power failure or other reasons, the title being recorded will not be saved onto the disc.
- Recording will stop automatically if a copy protected image is input.
- Do not use DVD-R authoring discs with this unit.
- To set a channel over 100, hold down the 100+ button first:
  Example: CH 100 → 100+ (1) (extended pressing) + (0) + (0)
- Pressing the AUDIO button on remote control during MTS audio reception will switch the audio as follows:
  [MAIN] → [SAP] → [MONO]
  ↑ ← ← ←

Making One Touch Recording (OTR)

DVD-RAM DVD-RW DVD-R

One-Touch Recording (OTR) allows you to add recording time in 30-minute increments up to 6 hours at the touch of a button.

1 Use the DVD CHANNEL button or numeric buttons to select the channel to record.
- CATV channel: 1 to 125
- TV channel: 2 to 69

2 **Start Recording.**

Follow the instructions on page 63 to begin recording.

3 **Activate OTR.**

While in Record mode, press the REC button again to activate One-Touch Recording (OTR).
- Record length 0:30 appears on the On-Screen Display and the DVD Recorder-VCR will record for exactly 30 minutes.

4 **Add Recording Time.**

Continue pressing REC to add recording time in 30 minute increments up to 6 hours.
- The DVD Recorder-VCR stops recording automatically when the time has elapsed.

Note

■ Extended pressing of numeric button “1” will deliver “100”.

Making a Timer Recording

DVD-RAM DVD-RW DVD-R

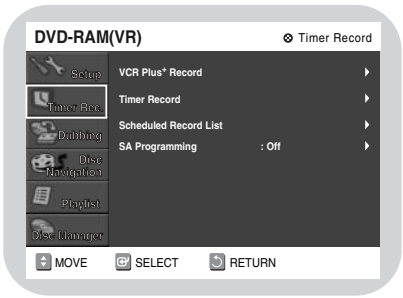
Preliminary

1. Check the antenna cable is connected.
2. Check the remaining time of the disc.
3. Check the date and time are correct.

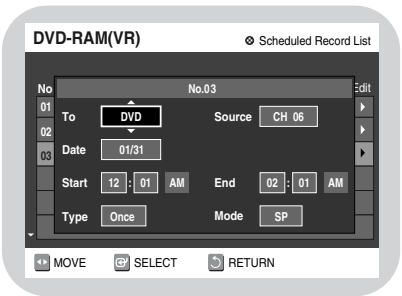
Make sure the Clock has been set (Setup - System Setting) before you proceed with a timer recording.

1 **Press the TIMER button.**
- Scheduled Record List screen is displayed.

Using the MAIN MENU button:
① Press the MAIN MENU button.
② Press the ▲▼ buttons to select Timer Rec., and then press the ENTER or ► button.
③ Select Timer record.
- If the current time is not set. Set the current time first.



Using the TIMER button



2 Set timer recording option.

- The Timer Recording screen is displayed. Fill the input items using the DIRECTION buttons.
◀▶: Moves to the previous/next item,
▲▼: Sets a value.
- TO : Select the media to record DVD or VCR.
- SOURCE : The video input source (L1 or L2), or the broadcasting channel you want to make a timer recording from.
- Date : Set the recording day.
- Start/End Time : Start and end time of the timer recording.
- Type (Recording cycle).
Once : Records once.
Weekly : Records at a set time every week.
Daily : Records at a set time every day.
- Mode (Recording mode).

DVD

XP (high quality) : Select when audio and video qualities are important. (Approx. 1 hour)
SP (standard quality) : Select to record in standard quality. (Approx. 2 hours)
LP (low quality) : Select when a long recording time is required. (Approx. 4 hours)
EP (extended mode) : Select when a longer recording time is required. (Approx. 6 hours about 1.2 Mbps)
Auto (Auto mode) : Select when you want to set video quality automatically. It depends on the remaining time on the DVD.

VCR

SP : Standard Play, for best picture quality.
SLP : Super Long Play, for maximum recording time (3 times SP).
Auto (Auto mode) : Select when you want to set video quality automatically. It depends on remaining time of VCR tape.

3 Press the ENTER button.

- ◷ will appear on the front panel. It means that a timer recording is registered.

If you make a mistake
Press the ◀▶ buttons to select the item you want to change.

If the timer settings overlap
The programs are recorded in order of priority. If timer recording is set for the first program and then again for the second program and both programs overlap, the following message will appear on the screen: "This setting is identical with 1"
The message shows that the first program has priority. After recording of the first program is complete, the second program starts being recorded.

To exit without saving the current setting
Press the MAIN MENU button.

To return to the previous menu
Press the RETURN button if you don't want to set a timer recording.

Note

■ The timer recording time may differ from the set time depending on disc status and overall timer recording status (for example, recording times overlapping, or when the previous recording ends within 2 minutes before the start time of the next recording.)

Editing Timer Record List

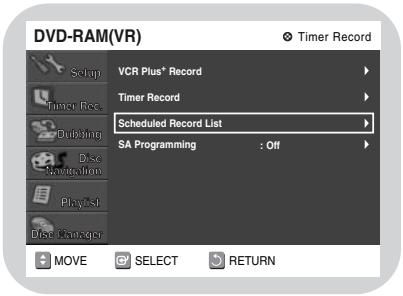
DVD-RAM DVD-RW DVD-R

Follow these directions to edit the timer record list.

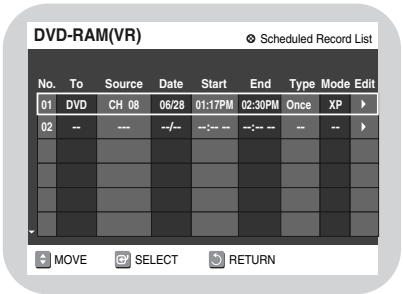
Editing the settings for a timer recording

1 Press the MAIN MENU button.

2 Press the ▲▼ button to select Timer Rec., and then press the ENTER or ► button.

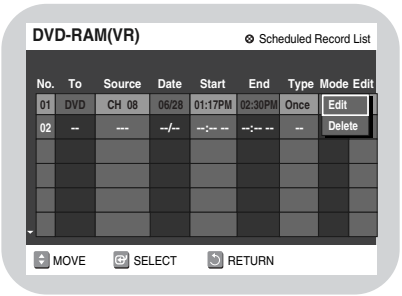


3 Press the ▲▼ button to select Scheduled Record List, and then press the ENTER or ► button.


DVD-RAM(VR)
Scheduled Record List
No. To Source Date Start End Type Mode Edit
01 DVD CH 08 06/28 01:17PM 02:30PM Once XP
02 -- --- --/-- --:-- -- --:-- -- -- --
MOVE
SELECT
RETURN

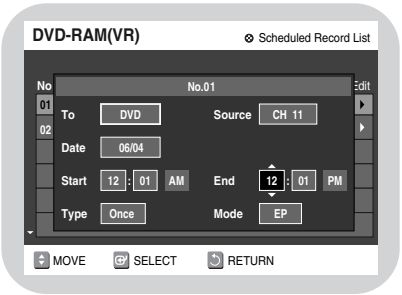
4 Press the ▲▼ button to select the number of the timer recording you want to edit, and then press the ENTER or ► button.

• The Edit and Delete items are displayed.


DVD-RAM(VR)
Scheduled Record List
No. To Source Date Start End Type Mode Edit
01 DVD CH 08 06/28 01:17PM 02:30PM Once Edit
02 -- --- --/-- --:-- -- --:-- -- -- Delete
MOVE
SELECT
RETURN

5 Press the ▲▼ button to select Edit, and then press the ENTER button.

• The Timer Recording screen is displayed. Edit the items you want to modify. See the Timer Recording section for more information on Timer Recording Input items.
• Pressing the TIMER button on remote control will also display the Timer Recording screen.



6 Press the ENTER button to confirm the edited setting.

Deleting a Timer Recording Entry

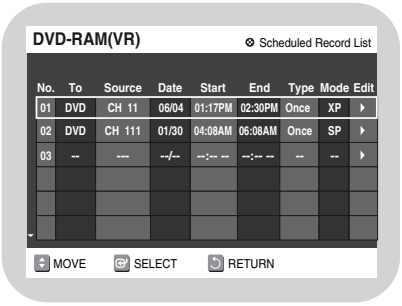
DVD-RAM DVD-RW DVD-R

Follow these directions to delete an entry from the timer record list.

1 Press the MAIN MENU button.

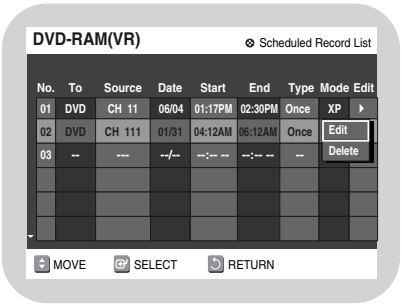
2 Press the ▲▼ button to select Timer Rec., and then press the ENTER or ► button.

3 Press the ▲▼ button to select scheduled Record List, and then press the ENTER or ► button.


DVD-RAM(VR)
Scheduled Record List
No. To Source Date Start End Type Mode Edit
01 DVD CH 11 06/04 01:17PM 02:30PM Once XP
02 DVD CH 111 01/30 04:08AM 06:08AM Once SP
03 -- --- --/-- --:-- -- --:-- -- -- --
MOVE SELECT RETURN

4 Press the ▲▼ button to select the number of the timer recording you want to delete, and then press the ENTER button.

• The Edit and Delete items are displayed.


DVD-RAM(VR)
Scheduled Record List
No. To Source Date Start End Type Mode Edit
01 DVD CH 11 06/04 01:17PM 02:30PM Once XP
02 DVD CH 111 01/31 04:12AM 06:12AM Once
03 -- --- --/-- --:-- -- --:-- -- --
Edit
Delete
MOVE SELECT RETURN

5 Press the ▲▼ button to select Delete, and then press the ENTER button.

• You will be prompted with the delete confirm message such as 'Do you want to delete No.02?'.

6 Press the ▲▼ button to select Yes, and then press the ENTER button.

• The selected entry will be deleted from the list.

7 Press the MAIN MENU button after finishing the operation. The menu screen will disappear.

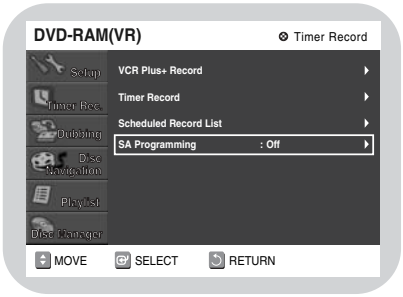
Satellite Link Recording

Connect a device on which reservation standby is possible, such as a CS tuner, to the LINE IN 1 jacks on the back of this DVD Recorder-VCR: You can then start recording, interlocking with the beginning of the broadcast program. Set the connected device to reservation standby in advance.

1 Press the MAIN MENU button.

2 Use the ▲▼ buttons to choose “Timer Rec.”, and then press the ENTER button.

3 Use the ▲▼ buttons to choose “SA Programming”, and then press the ENTER button.



4 Use the ▲▼ buttons to choose “VCR” or “DVD”, and then press the ENTER button.

- The reserved program will be recorded on the selected device.

5 Press the POWER button.

- The DVD Recorder-VCR will turn off.
- When the reserved program begins, recording will start simultaneously.
- “SA” and “ ◷ ” will appear in the display of DVD Recorder-VCR.
- If the signal from the connected device is interrupted, recording will stop and the DVD Recorder-VCR will automatically turn off.

Note

- Sometimes, when the DVD Recorder-VCR senses that the reserved program has begun and starts recording, the beginning of program may not be recorded.
- Satellite link recording is not possible using the S VIDEO IN, LINE 2 (L2) or DV IN jack.
- Choose “Off” in step 4 above to release satellite link recording.
- Satellite link recording will not work during timer recording: If signals are input to the LINE IN 1 jacks when timer recording has finished, the DVD Recorder-VCR will turn off, and then satellite link recording will start.
- Even if timer preset time is reached during satellite link recording, satellite link recording will have priority.
- If satellite link recording has been set, the fan will still rotate after the DVD Recorder-VCR turns off.

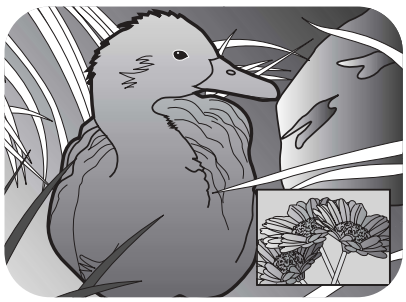
Watching the Images Being Recorded (Time Slip)

DVD-RAM

This function allows you to watch the recently recorded 10-second images on the P in P screen while a recording is in progress.

1 During recording, press the TIME SLIP button on remote control.

- The recently recorded 10-second images are played back on the P in P screen.
- This function starts to operate 10 seconds from the time you press the REC button.
- On the TIME SLIP screen, you can play back, scan, or perform other operations for the recorded program.
  Press the ◀◀ button to scan the recording in the reverse order, from the end to the start.
  Press the ▶▶ button to scan to the recently recorded 10- second images.



2 Press the STOP button once to cancel the TIME SLIP function.

- To stop a recording while a TIME SLIP function is in progress, press the STOP button twice.

Note

- The Time Slip function does not operate during a timer recording.
- The Time Slip feature only works with DVD-RAM discs.
- Pressing the P in P button will switch the images between the P in P and normal screens.

Recording From External Devices

Follow these directions to record onto a disc or a tape from External Devices.

1 Connect the Line out jack of your External Devices to the Line IN jack on the front or rear of your DVD Recorder-VCR using Audio/Video Cable.

2 Power on your DVD Recorder-VCR and switch to Line In mode by pressing the INPUT button on the remote.
The front panel display changes on the following sequence
→ Channel Number → L1 → L2→ DV →

3 When your DVD Recorder-VCR is in the stop state, set the operation mode of your External Devices to play mode.

4 Press the REC button on your DVD Recorder-VCR when the image from which you want to start recording is displayed.

5 Press the STOP button on your DVD Recorder-VCR when the recording is finished.

Note

- Also refer to the user manual for your External Devices when recording through Line In mode using Audio/Video cable.

Playing while Recording (Chasing Play)

While recording one program, you can simultaneously play back a previously recorded program.
You can also play back from the start of the program currently being recorded.

During recording:

1 Press the PLAY button.

- The DVD Recorder-VCR will play back the program currently being recorded, starting at the beginning.
- If the DVD Recorder-VCR played some program immediately before starting to record, it will play from the beginning of that program.
- No playback can be performed for approx. 10 seconds after recording starts.

Using Disc Navigation to select a program for chasing play:

During recording:

1 Press the Disc Navigation button.

2 Use the ▲▼ buttons to choose a desired program, and then press the ENTER button.

- You can also select the program that is currently being recorded.

3 Make sure that "Play" has been chosen, and then press the ENTER button.

- Playback will start.

■ To stop playback or recording:

1. Press the STOP button.
   Only the playback will stop (the program being recorded will appear).

After a few seconds:

2. Press the STOP button.
   Recording will stop.

■ To stop timer recording:

1. Press the STOP button: The screen for verification to stop will appear.
2. Use ◄► to choose "Yes", and then press the ENTER button.

Recording through DV jack

DVD-RAM DVD-RW DVD-R

Follow these directions to record onto a disc the output of a camcorder that has a DV output jack.

1 Connect the DV output jack of your camcorder to the DV input jack on the front of your DVD Recorder-VCR using a DV cable.

2 Power on your DVD Recorder-VCR and switch to DV mode by pressing the INPUT button on the remote.

3 With your DVD Recorder-VCR stopped, set the operation mode of your camcorder to play mode.

4 Press the REC button on your DVD Recorder-VCR when the image from which you want to start recording is displayed.

5 Press the STOP button on your DVD Recorder-VCR when the recording is finished.

Note

- Some camcorders may not work with your DVD Recorder-VCR even if they have a DV output jack.
- Also refer to the user manual for your camcorder when recording through a DV jack.

Basic VCR Recording

DVD-RAM DVD-RW DVD-R

Preliminary

Before starting

1. Check TV channel and Antenna connections.
2. Check the remaining time on the tape.

You can record a TV show in progress by inserting a blank tape and pressing the REC button. You can even add time in 30-minute increments up to 6 hours by pressing the REC button repeatedly; see page 64.

Note

- Be sure your videotape has a Record Safety Tab. If the tab is missing, you can cover the opening with a small piece of tape. Warning: Do not cover this opening unless you are sure you want to record over the tape.

1 Insert Tape

Insert a blank VHS tape into the VCR deck.

- Make sure the tape is long enough to record the entire program.
  To change the Recording Speed, see page 72.

2 Select a Channel to Record

Use the 0–9 buttons or the DVD CHANNEL buttons to select the desired channel, or press the INPUT button to select Line 1, Line 2 or DV if recording from an external device connected to the front or rear Line inputs, respectively.

3 Start Recording

Press the REC button on the remote control or front panel.
For options while recording is in progress, see "Special Recording Features".

4 Pause/Resume Recording

Press the PAUSE button.
Press REC again to resume.

5 Stop Recording

Press the STOP button.

Special Recording Features

While a recording is in progress, you can watch a different channel, watch a different media, or add recording time in 30-minute increments.

1 Watch a different media during recording

You can watch DVD during VCR recording or watch Video tape during DVD recording.

- During VCR recording, insert a DVD in the DVD deck. The output will automatically change to the DVD and start playback.
- During DVD recording, insert a Video tape in the VCR deck. The output will automatically change to the VCR and start playback. (Only if tape is missing the safety tab)

2 Add Recording Time

Refer to the One-Touch Recording (OTR).

3 Recording DVD and VCR at the same time

You can record DVD and VCR at the same time, but both modes must be set up to record separately.

- Press the DVD/VCR button to set the unit to DVD or VCR mode.
- Choose Line input mode (Ch, Line 1, Line 2 or DV). for DVD or VCR.
- Choose REC mode for DVD or VCR.
- Press REC button for DVD or VCR.

Note

- When DVD Recorder-VCR is connected to TV using S-Video or component video cable, the playback screen on the video tape will not display during DVD recording.
- You cannot record a different channel at the same time.
- The DVD and VCR cannot start recording at the exact same time. You must set one mode to start recording, then the other.

Record Speed

You can slow down the recording speed from SP to SLP in order to fit six hours of programming on a T-120 tape.

1 Set Record Speed

Press the REC MODE button on the remote control to set the Record Speed to one of the following options:

- SP – Standard Play, for best picture quality.
- SLP – Super Long Play, for maximum recording time (3 times SP).

2 Start Recording

Follow the Basic VCR Recording instructions on page 71 .

Note

- The selected Record Speed will appear on the front panel display and on-screen display.

Maximum Recording Time - SP vs. SLP

Tape Length	SP (Standard Play)	SLP (Super Long Play)
T-120	2 hrs	6 hrs
T-160	2 hrs 40 mins	8 hrs
T-180	3 hrs	9 hrs

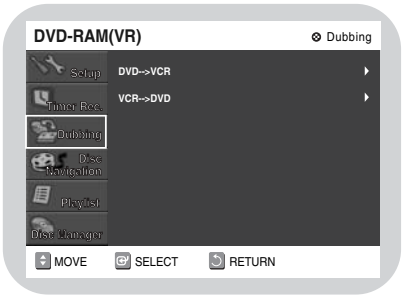
Note

- When you watch or record on the VCR during DVD Recording, some function buttons may not operate.
  The message “This function is not available.” will be displayed.

Dubbing to DVD or VCR

DVD-RAM DVD-RW DVD-R

You can dub from DVD to VCR, or from VCR to DVD.
Press MAIN MENU button and select Dubbing.



DVD to VCR

You can dub any contents recorded on DVD disc to videotape, using one of the following three ways:

1. Creating a dubbing list and dubbing any entries from the list.
2. Dubbing all programs on disc (direct dubbing)
3. Dubbing from the scene you are now watching (one-button dubbing)

Before You Begin

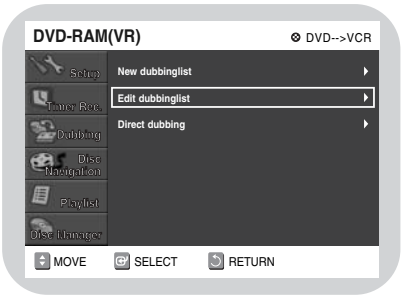
1. Insert a VHS videotape.
2. Choose the record mode of VCR.
3. Insert a DVD disc.

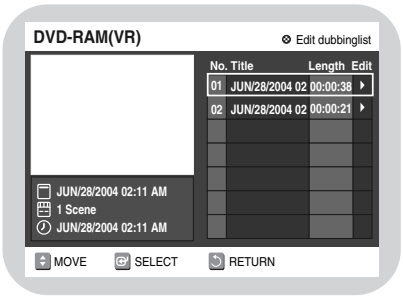
1 Select DVD —> VCR to dub from DVD to VCR.

• Check the remaining time on the tape.

2 If you want to dub from Dubbinglist, choose “Edit Dubbinglist”.

• To dub from “Edit Dubbinglist”, you need to make a Dubbinglist. To make and select a “New Dubbinglist” (See pages 86~87).
• Choose “Direct dubbing” if you wish to dub all the contents on DVD disc from beginning to end.

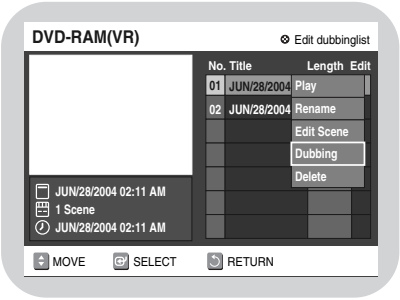




Recording

3 Select the Dubbinglist you want to dub, using the ▲▼ buttons, and then press ► button. To dub from play list, select “Dubbing”.

- Note that only “Direct dubbing” or one-button dubbing is possible on finalized DVD-RW (VR mode) discs.
- In addition, only one-button dubbing is possible on DVD-R/DVD-RW (Video mode) and finalized DVD-RW (Video mode) discs.



- “dub” will appear in the front panel display.
- When dubbing is complete, the DVD Recorder-VCR will stop automatically.
- Press the STOP button to stop dubbing midway.
- No on-screen display will appear when dubbing from DVD to VCR.

For immediate dubbing (one-button dubbing)

- Pressing the DUBBING ► VCR button on this DVD Recorder-VCR or remote control will start dubbing from DVD disc to videotape.
- Depending on the status of DVD disc, the DVD Recorder-VCR will perform one of the following three operations:
  1. Insert the DVD disc, and then press the DUBBING button:
     The latest program recorded on disc will be dubbed.
  2. Press the DUBBING button during playback of DVD disc:
     Dubbing will start from the scene you are now watching.
  3. Press the DUBBING button with the DVD disc stopped:
     Dubbing will be performed from the scene following that you have been watching.
- When DVD disc has played to the end, the DVD Recorder-VCR will stop automatically.
- Press the STOP button to stop dubbing midway.

VCR to DVD

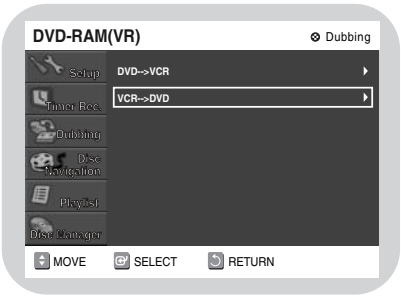
Before You Begin

1. Insert a recordable DVD disc.
2. Choose the record mode of DVD.
3. Insert a VHS videotape.

1 Select VCR —> DVD to dub from VCR to DVD.

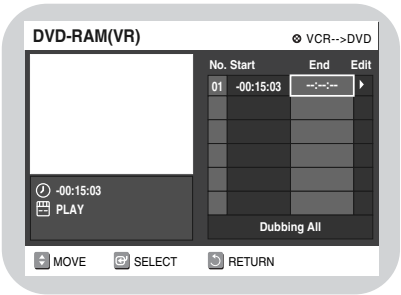
VCR --> DVD scene will be displayed.

- Check the remaining time on the disc.



2 Press ENTER button to select the start position.

You can use PLAY, ◄◄ or ►► button to search for the Start position.

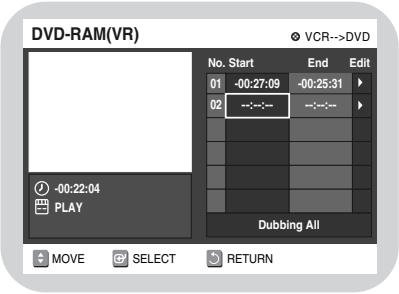


3 Select the End position in the same way.

A Dubbinglist will be generated.

- In VCR mode, the Dubbinglist cannot be saved.

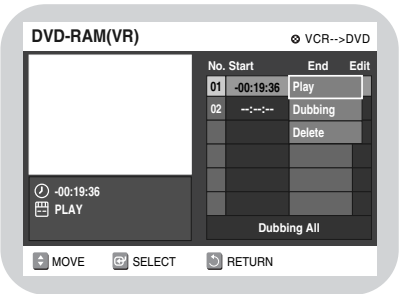
4 Press Enter button to choose the list you want to dub from.



• If you want to dub all content, select “Dubbing All”.

5 To dub Dubbinglist, select “Dubbing”.

• Choose “Play” and press the ENTER button: The dubbing list will be played back.
• Choose “Delete” and press the ENTER button: The dubbing list will be deleted.



• The VCR will fast forward, searching for a start position and then automatically start dubbing.
• It may not be match up with Start and END point exactly.
• When dubbing is complete, the DVD Recorder-VCR will stop automatically.
• Press the STOP button to stop dubbing midway.
• When dubbing is complete, the dubbing list will be cleared.

For immediate dubbing (one-button dubbing)

Dubbing will start from the position where the DUBBING button is pressed either during play-back or in the stop status.

1 Insert the VHS tape you want to dub.

2 Insert Recordable DVD disc.

3 Press DVD DUBBING button on front panel or remote control.

4 To stop dubbing, press the STOP button.

Editing

- *Viewing the Menu Functions for a Disc 76*
- *Viewing Disc Navigation Screen (title list) 78*
- *Playing a Disc Navigation Entry . . . 79*
- *Renaming a Disc Navigation Entry 80*
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- *Displaying a List of Scenes (Scene Navigation) 84*
- *Skipping to a Desired Time and Playing (Time Navigation) 85*
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- *Editing a Playlist Entry 87*
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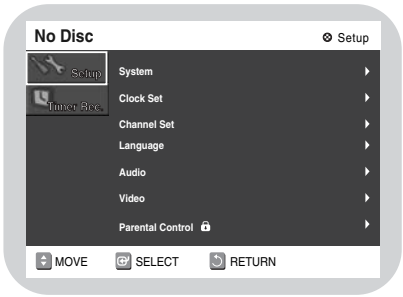
- *Disc Manager 94*

Viewing the Menu Functions for a Disc

DVD-RAM DVD-RW DVD-R

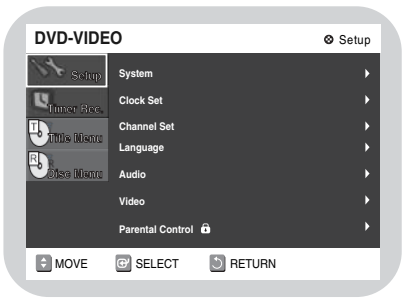
There are a variety of menu functions depending on the disc type. Press the MAIN MENU button.

No Disc



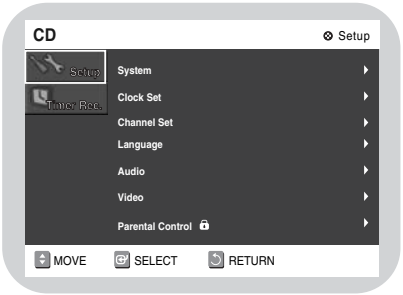
Setup
Timer Rec.

DVD-VIDEO



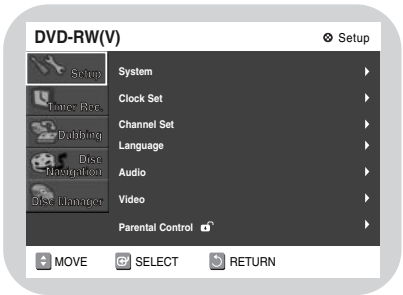
Setup
Timer Rec.
Title Menu
Disc Menu

CD



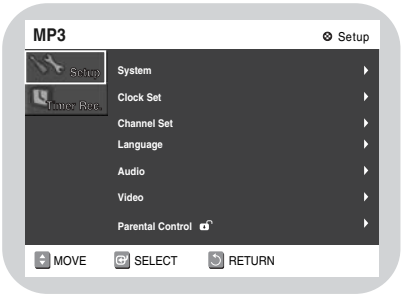
Setup
Timer Rec.

DVD-RW(V)



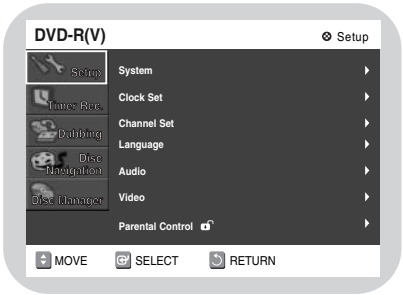
Setup
Timer Rec.
Dubbing
Disc Navigation
Disc Manager

JPEG, MP3



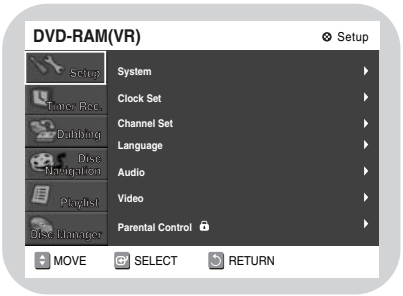
Setup
Timer Rec.

DVD-R(V)



Setup
Timer Rec.
Dubbing
Disc Navigation
Disc Manager

DVD-RAM(VR)



Setup
Timer Rec.
Dubbing
Disc Navigation
Playlist
Disc Manager

Note

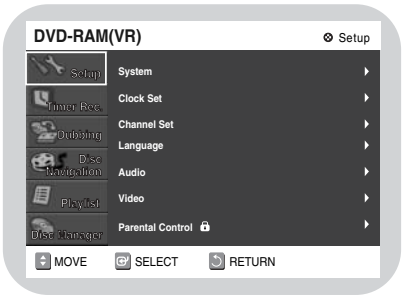
■ Press the MAIN MENU button again to hide the menu screen. You can configure the settings on the Setup screen using the DIRECTION and ENTER buttons.

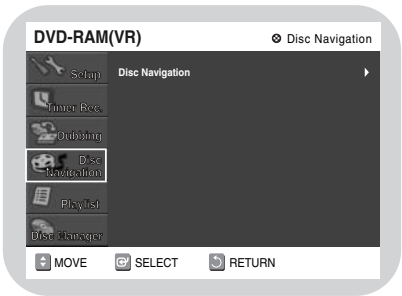
Viewing Disc Navigation Screen (title list)

DVD-RAM DVD-RW DVD-R

You can play back the recorded titles, edit a title name, edit record list entries and lock or unlock the record list.

1 Press the MAIN MENU button.



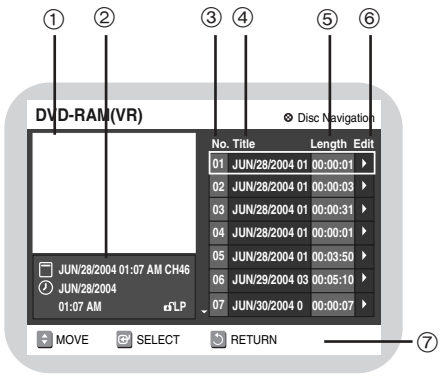


Note

■ Disc Navigation : Title refers to a recorded video stream. Disc Navigation shows a list to help you select a title. Since the Disc Navigation screen consists of the information on data that is actually recorded, if one title is deleted, that title cannot be played again.

2 Press the ▲▼ button to select Disc Navigation, and then press the ENTER or ► button, or press the TOP MENU/DISC NAVIGATION button on the remote control.

• The Disc Navigation screen is displayed.



① Playback screen for recorded entry.
② Information window for the selected entry: Title name, recording date, recording time, lock status, recording mode.
③ Recorded entry No.
④ Recorded entry title.
⑤ Recording duration (i.e., playtime).
⑥ Record list edit items.
⑦ Button display.

Record List edit items

1 Press the ▲▼ button to select an entry to edit, and then press the ENTER or ► button.

• Play : Plays the selected entry.
• Rename : Renames the title of the selected entry.
• Delete : Deletes the selected entry from the list.
• Edit : Deletes a desired section.
(DVD-RAM/DVD-RW(VR mode)
• Protection : Locks or unlocks the selected entry.
• Scene Navi.: Allows you to display a list of the scenes recorded on DVD-RAM disc using a DVD video camera/recorder, and also the scenes with markers attached to the program recorded on this DVD Recorder-VCR.
• Time Navi.: Allows you to select the desired scenes in one-minute units from the list of recorded programs (Disc Navigation), and then play them.

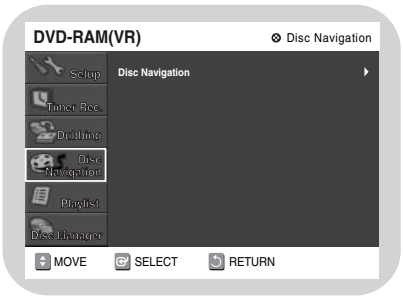
2 Press the MAIN MENU button again after the operation is finished. The menu screen will disappear.

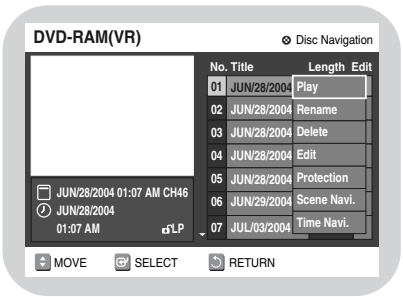
Playing a Disc Navigation Entry

DVD-RAM DVD-RW DVD-R

Follow these directions to play back an entry from the Disc Navigation screen.

1 Press the MAIN MENU button.





2 Press the ▲▼ button to select Disc Navigation, and then press the ENTER or ► button, or press the TOP MENU/DISC NAVIGATION button on the remote control.

• The Disc Navigation screen is displayed.

3 Press the ▲▼ button to select an entry you want to play back from the Disc Navigation screen, and then press the ENTER or ► button.

• The Disc Navigation menu is displayed.

4 Press the ▲▼ button to select Play, and then press the ENTER button.

• The selected entry (title) will be played back.

Note

■ You can also play back a recorded program by pressing the FUNCTIONS button and using the title, chapter or time items.

Renaming a Disc Navigation Entry

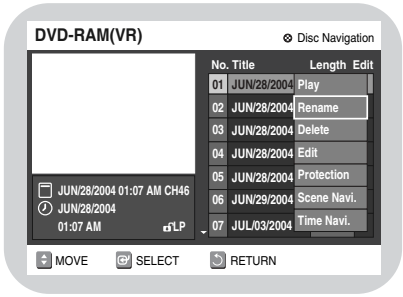
DVD-RAM DVD-RW DVD-R

Follow these directions to rename a Disc Navigation entry, i.e., to edit the title of a recorded program.

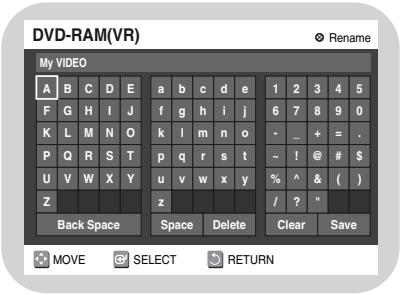
1 Press the MAIN MENU button.

2 Press the ▲▼ button to select Disc Navigation, and then press the ENTER or ► button, or press the TOP MENU/DISC NAVIGATION button on the remote control.
• The Disc Navigation screen is displayed.

3 Press the ▲▼ button to select an entry you want to rename from the Disc Navigation screen, and then press the ENTER or ► button.
• The Disc Navigation menu is displayed.

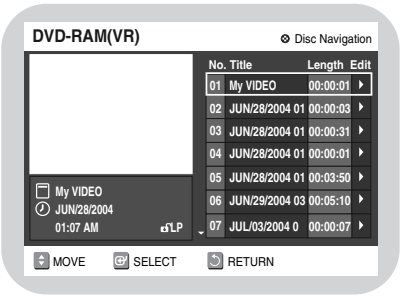


4 Press the ▲▼ button to select Rename, and then press the ENTER button.
• The Rename screen is displayed.



5 Enter the desired characters using the DIRECTION (▲▼◄►) buttons.
• Back Space: Moves the cursor to the previous character. (Functions the same as the CANCEL button)
• Space: Enters a blank and moves the cursor to the right.
• Delete: Deletes the character at the cursor position.
• Clear: Deletes all the character inputs.
• Save: Registers the character inputs.

6 Press the DIRECTION buttons to select Save, and then press the ENTER button.
• The changed title is displayed on the title item of the selected entry.



Editing

Deleting a Disc Navigation Entry

DVD-RAM DVD-RW DVD-R

Follow these directions to delete an entry from the Disc Navigation screen.

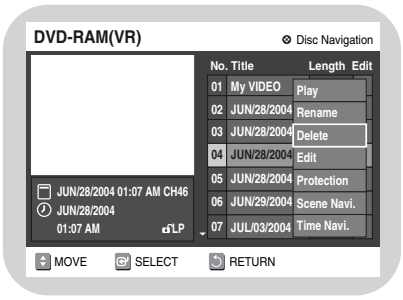
1 Press the MAIN MENU button.

2 Press the ▲▼ button to select Disc Navigation, and then press the ENTER or ► button, or press the TOP MENU/DISC NAVIGATION button on the remote control.

• The Disc Navigation screen is displayed.

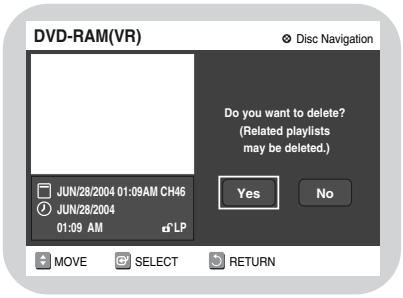
3 Press the ▲▼ button to select an entry you want to delete from the Disc Navigation screen, and then press the ENTER or ► button.

• The Disc Navigation menu is displayed.



4 Press the ▲▼ button to select Delete, and then press the ENTER button.

• You cannot delete a protected entry.
If you want to delete a protected entry, select "OFF" in the protection menu.



5 Press the ◄► button to select Yes and then press the ENTER button.

• The screen for verifying deletion will appear and the program will be deleted.

Note

■ Be careful, since you cannot recover an entry once it is deleted from the Disc Navigation screen.

Locking a Disc Navigation Entry

DVD-RAM DVD-RW DVD-R

Follow these directions to lock an entry if you want to protect it from unexpected deletions.

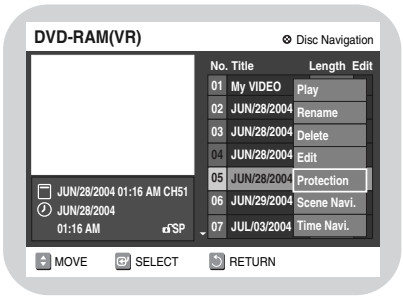
1 Press the MAIN MENU button.

2 Press the ▲▼ button to select Disc Navigation, and then press the ENTER or ▶ button, or press the TOP MENU/DISC NAVIGATION button on the remote control.

• The Disc Navigation screen is displayed.

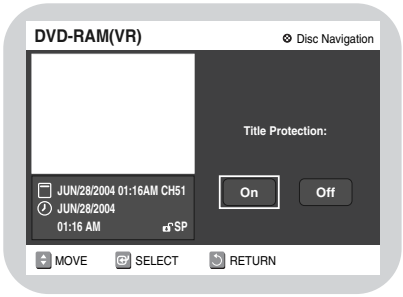
3 Press the ▲▼ button to select an entry you want to protect from the Disc Navigation screen, and then press the ENTER or ▶ button.

• The Disc Navigation menu is displayed.



4 Press the ▲▼ button to select Protection, and then press the ENTER button.

• You will be prompted with the confirmation message 'Title Protection:'.



5 Press the ◀▶ buttons to select On, and then press the ENTER button.

• The Lock icon on the information window for the selected entry changes to the locked status.

Deleting any Section of Disc Navigation Entry

DVD-RAM DVD-RW

Follow these directions to delete any section of Disc Navigation entry.

1 Press the MAIN MENU button.

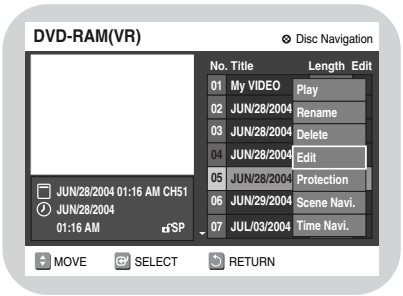
• You cannot recover a section of Disc Navigation entry once it is deleted.

2 Press the ▲▼ button to select Disc Navigation, and then press the ENTER or ► button, or press the TOP MENU/DISC NAVIGATION button on the remote control.

• The Disc Navigation screen is displayed.

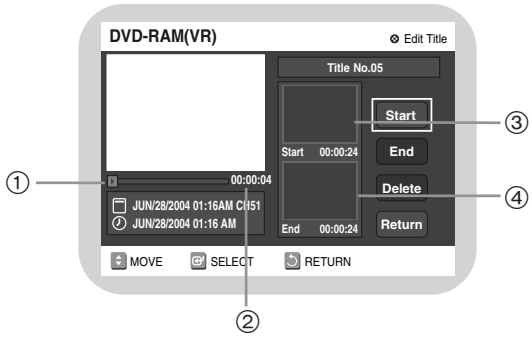
3 Press the ▲▼ button to select an entry you want to edit a title from the Disc Navigation screen, and then press the ENTER or ► button.

• The Disc Navigation menu is displayed.



4 Press the ▲▼ button to select Edit, and then press the ENTER button. The Edit Program is displayed.

① Playback bar
② Playtime
③ Section deletion start point window and time
④ Section deletion end point window and time



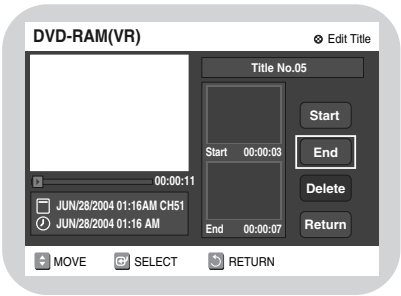
5 Search the start points of the section you want to delete.

Note

■ Be careful, since you cannot recover the section of title on Disc Navigation screen once it is deleted.

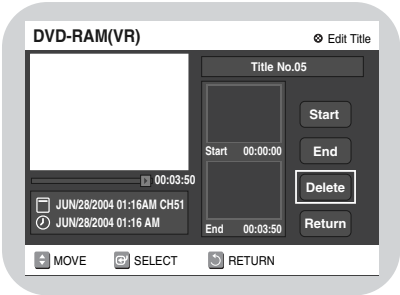
6 Press the ▲▼ button to select Start, and then press the ENTER button.

• The image and time at the start point are displayed on the start window.



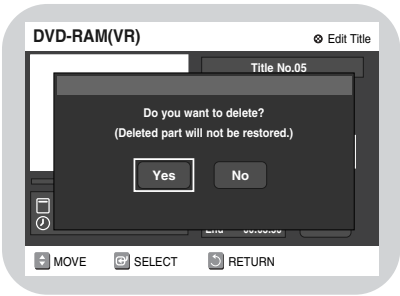
7 Press the ENTER button at the end point.

8 The image and time at the end point are displayed the end point window.



9 Press the ▲▼ buttons to select Delete, and then press the ENTER button.

- Message "Do you want to delete? (Deleted part will not be restored.)" will be displayed.
- If you want to cancel deletion, press the RETURN button to return to the Disc Navigation screen.



10 Press the MAIN MENU button again to exit the menu after the operation is finished. The Disc Navigation screen will disappear.

Note

- The length of the selection to delete should be at least 5 seconds long.
- If the length of the section to delete is less than 5 seconds, you will be prompted with the message "The range is too short".
- If the end time precedes the start time, you will be prompted with the message "End point cannot be marked earlier than start point".

Displaying a List of Scenes (Scene Navigation)

DVD-RAM RW VR

- Scene Navi. allows you to display a list of the scenes recorded on DVD-RAM disc using a DVD video camera/recorder.
- Scene Navi. also allows you to display the scenes with markers attached to the program recorded on this DVD Recorder-VCR (see "Using Markers/Bookmarks" on page 48).
- You can start playback from any selected scene using the Disc Navigation screen.
- Use 8-cm DVD-RAM discs after removing them from cartridges.

1 Press the DISC NAVIGATION button in the playback or stop status.

2 Use the ▲▼ buttons to select a program, and then press the ENTER button.

3 Use the ▲▼ buttons to choose "Scene Navi.", and then press the ENTER button.

- If the scene has no marker, "This [Menu] is not available because this title list has no scene" will appear.

4 Use the ◄ ► buttons to select the desired scene, and then press the ENTER button.

- Playback will start from the selected scene.

Skipping to a Desired Time and Playing (Time Navigation)

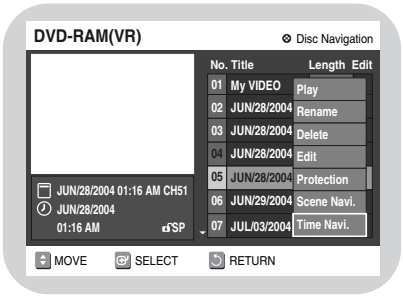
DVD-RAM

Time Navi. allows you to select desired scenes in one-minute units from a list of recorded programs (Disc Navigation), and then play them.

1 Press the DISC NAVIGATION button in the playback or stop status.

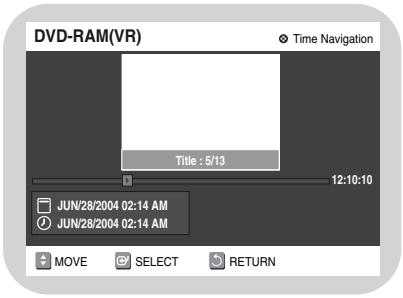
2 Use the ▲▼ buttons to select a program, and then press the ENTER button.

3 Use the ▲▼ buttons to choose “Time Navi.”, and then press the ENTER button.



4 Use the ◄ ► buttons to select the desired scene, and then press the ENTER button.

- Each press of ◄ ► will move the cursor in one-minute units.
- Playback will start from the selected scene.



To stop playback

Press the STOP button.

Note

- The cursor will not move with a program whose recording time is less than one minute.
- Time Navi. will not work with programs in which still images (photos) have been recorded.
- Time Navi. may not properly operate if a disc recorded on a device other than this DVD Recorder-VCR is used.
- The search time will not correctly appear with a disc on which some part of the program has been deleted.

Creating a Playlist Entry

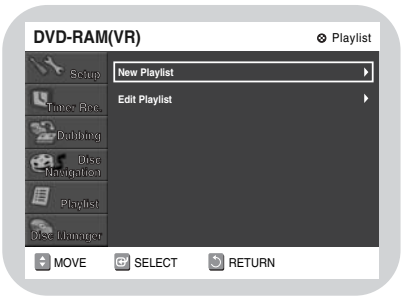
DVD-RAM DVD-RW

VR mode

Follow these directions to create a new playlist entry from a recorded title.

1 Press the MAIN MENU button when the disc is stopped.

2 Press the ▲▼ button to select Playlist, and then press the ENTER or ► button.



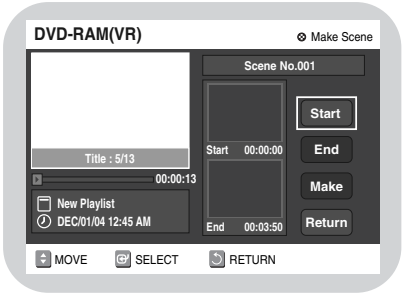
3 Press the ▲▼ button to select New Playlist, and then press the ENTER or ► button.

• The Make Scene screen is displayed.

Note

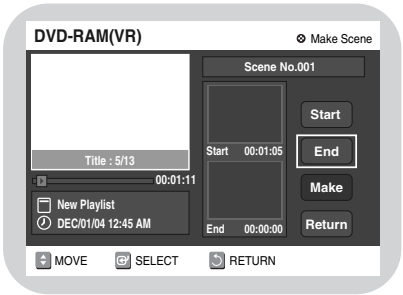
■ Play List : The Playlist is a unit of playback, which is created by selecting a desired scene in using Disc Navigation. Since only the information necessary for playing a desired scene is included in a playlist, even if that playlist is deleted, the original data will not be deleted.

4 Select the start point of the section from which you want to create a new scene, and then press the ENTER button.



5 Press the ▲▼ button to select Start, and then press the ENTER button.

• The image and time at the start point are displayed on the Start window.
• The yellow-colored selection bar moves to the End item.

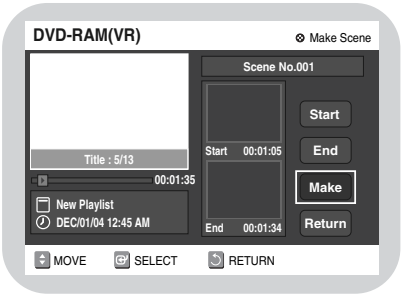


6 Search the end point of the section from which you want to create a new scene, and then press the PLAY button.

Editing

7 Press the ENTER button to select END point.

- The image and time at the end point are displayed on the End window.
- The yellow-colored selection bar moves to the Make item.



8 Press the ENTER button to confirm.

- A new Make Scene screen is displayed.
- Scenes to be made will be added to the current playlist.
- Repeat the above steps to make more than one scene.

9 If you want to cancel the selection, press the ▲▼ buttons to select RETURN, and then select the ENTER button.

- The Edit Playlist screen is displayed.

10 Press the MAIN MENU or RETURN button to exit the menu.

- The Playlist screen will disappear.

Editing a Playlist Entry

DVD-RAM DVD-RW

VR mode

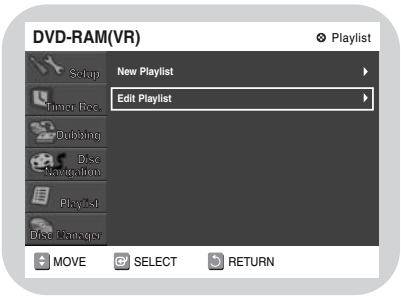
Follow these directions to play or edit (rename, edit scene, dubbing and delete) the newly created playlist entries.

1 Press the MAIN MENU button when the disc is stopped.

2 Press the ▲▼ button to select Playlist, and then press the ENTER or ► button.

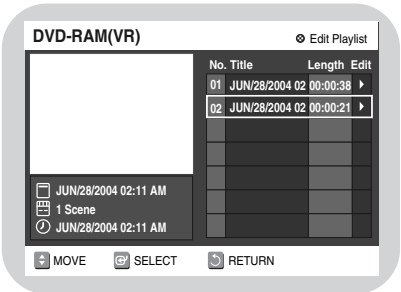
3 Press the ▲▼ button to select Edit Playlist, and then press the ENTER or ► button, or press the MENU/PLAY LIST button on the remote control.

- The Edit Playlist screen is displayed.



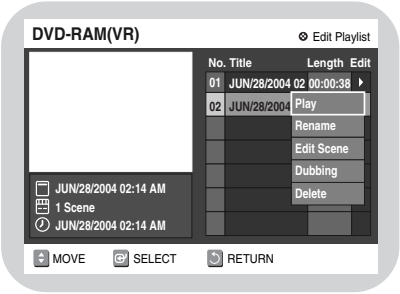
4 Press the ▲▼ button to select an entry (title) you want to edit from the Playlist, and then press the ENTER or ► button.

- The Edit Playlist menu is displayed:
  Play, Rename, Edit Scene, Dubbing, Delete



5 Press the ▲▼ button to select a function to use, and then press the ENTER button.

- Play: Plays the selected entry.
- Rename: Renames the title of the selected entry. This function is the same as the Rename item of Edit Disc Navigation menu.
- Edit Scene: Edits scenes of the selected entry.
- Dubbing: Dubs the selected entry.
- Delete: Deletes the selected entry from the list.



6 Press the MAIN MENU or MENU/PLAY LIST button after the operation is finished. The Playlist screen will disappear.

Playing Playlist Entries

Follow these directions to play back the playlist entries.

1 Press the ▲▼ button to select Play, and then select the ENTER button.

- The playlist entries will be played back.
- The screen returns to the Edit Playlist screen when the playback is finished.

2 Press the STOP button to stop the playback in progress.

- The screen returns to the Edit Playlist screen.

Renaming Playlist Entries

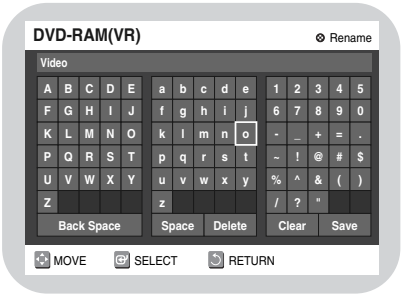
Follow these directions to rename a playlist entry, i.e., edit the title of a playlist entry.

1 Press the ▲▼ button to select Rename, and then press the ▶ or ENTER button.

- The Rename screen is displayed.

2 Select the desired characters using the DIRECTION ▲▼◀▶ buttons.

- This function is the same as the Rename item of Edit Disc Navigation screen.



3 Press the DIRECTION buttons to select Save, and then press the ENTER button.

- The Name you changed is displayed on the title item of the selected playlist entry.

Editing Scene for a Playlist Entry

VR mode

Follow these directions to edit scenes for a playlist entry.

1 Press the MAIN MENU button when the disc is stopped.

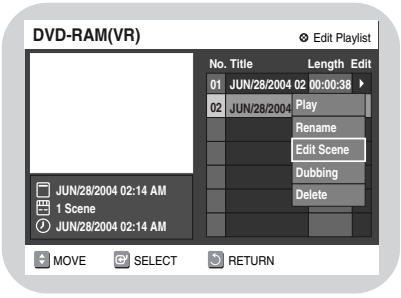
2 Press the ▲▼ button to select Playlist, and then press the ENTER or ► button.

3 Press the ▲▼ button to select Edit Playlist, and then press the ENTER or ► button, or press MENU/PLAY LIST button on the remote control.

• The Edit Playlist screen is displayed.

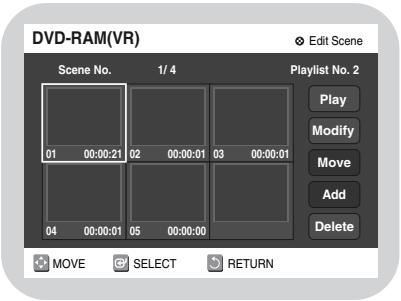
4 Press the ▲▼ button to select an entry (title) you want to edit from the Playlist, and then press the ENTER or ► button.

• The Edit Playlist menu is displayed.



5 Press the ▲▼ button to select Edit Scene, and then press the ENTER button.

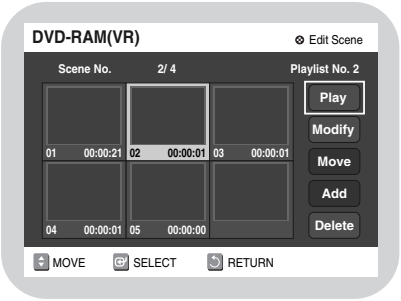
• The Edit Scene screen is displayed.



A. Playing a Selected Scene

1 Press the DIRECTION buttons to select the scene you want to play, and then press the ENTER button.

• The playlist entry to be played is selected.



2 Press the ENTER button.

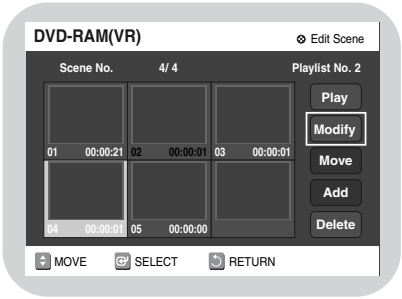
• The selected scene is played back.

B. Modifying a Scene (Replacing a Scene)

1 Press the DIRECTION buttons to select the scene you want to modify, and then press the ENTER button.

2 Press the DIRECTION buttons to select Modify, and then press the ENTER button.

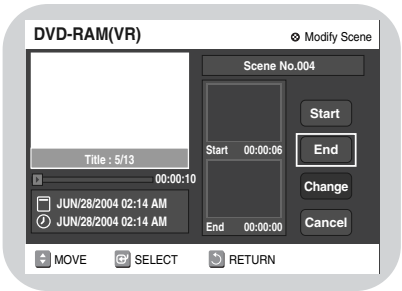
• The Modify Scene screen is displayed.



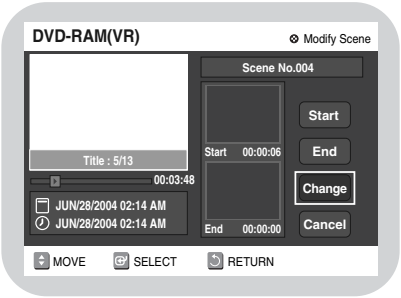
3 Select the start point of the section with which you want to modify the selected scene.

4 Press the ▲▼ button to select Start, and then press the ENTER button.

• The image and time at the start point are displayed on the Start window.



5 Press the ENTER button at the end point of the scene.



6 Press the ▲▼ buttons to select Change, and then press the ENTER button.

• The scene you wanted to modify is changed with the selected section.

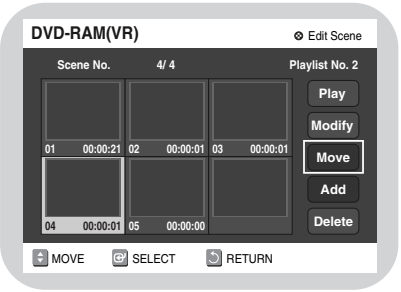
• If you want to cancel a modification, select cancel and then press the ENTER button.

C. Moving a Scene (Changing the Position of a Scene)

1 Press the DIRECTION buttons to select the scene you want to move (change the position), and then press the ENTER button.

2 Press the ▲▼ buttons to select Move, and then press the ENTER button.

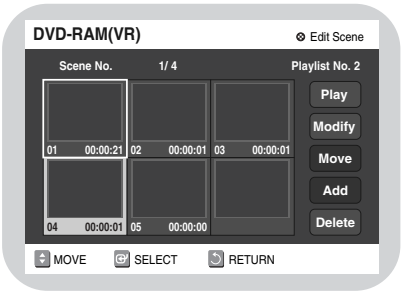
• A yellow selection window is displayed on the scene to move.



Editing

3 Press the DIRECTION buttons to select the position where you want to move the selected scene, and then press the ENTER button.

• The selected scene is moved to the new position.



Note

■ You cannot move the selected scene to the position of the next scene, because the selected scene should be inserted before that position.

D. Adding a Scene

1 Press the DIRECTION buttons to select the scene before which you want to add a new scene, and then press the ENTER button.

• A yellow selection window is displayed on the scene to add as a new scene.

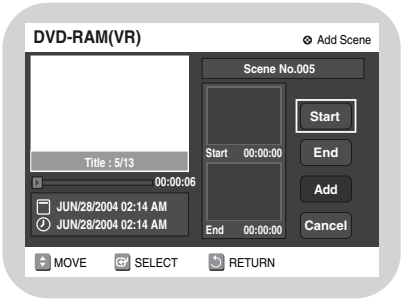
2 Press the ▲▼ buttons to select Add and then press the ENTER button.

• The Add Scene screen is displayed.

3 Select the start point of the section to which you want to add the scene in step 1.

4 Press the ▲▼ button to select Start, and then press the ENTER button.

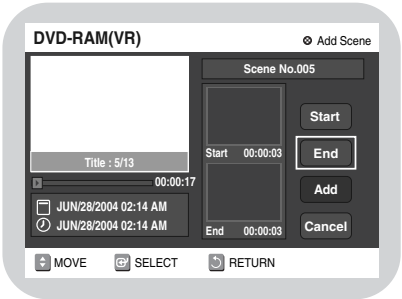
• The image and time at the start point are displayed on the Start window.



5 Select the end point of the section you want to add as a new scene.

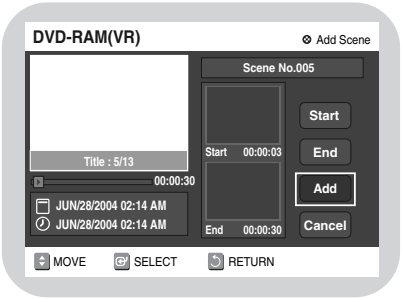
6 Press the ▲▼ button to select End, and then press the ENTER button.

• The image and time at the end point are displayed on the End window.



7 Press the ▲▼ buttons to select Add, and then press the ENTER button.

• The section you wanted to add will be inserted before the scene selected in step 1.



• If you want to cancel the addition, select Cancel and then press the ENTER button.

E. Deleting a Scene from the Playlist

1 Press the DIRECTION buttons to select the scene you want to delete, and then press the ENTER button.

2 Press the ▲▼ buttons to select delete, and then press the ENTER button.

Dubbing a Playlist Entry to the VCR

DVD-RAM DVD-RW

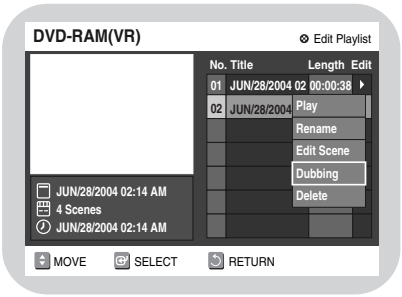
VR mode

1 Press the MAIN MENU button when the disc is stopped.

2 Press the ▲▼ button to select Playlist, and then press the ENTER or ► button.

3 Press the ▲▼ button to select Edit Playlist, and then press the ENTER or ► button, or press the MENU/PLAY LIST button on the remote control.

• The Edit Playlist screen is displayed.



4 Press the ▲▼ button to select an entry (title) you want to dub to the VCR, and then press the ENTER or ► button.

• The Edit Playlist menu is displayed:
Play, Rename, Edit Scene, Dubbing, Delete

5 Press the ▲▼ button to select Dubbing, and then press the ENTER button.

• The title you choose is played and dubbed to VCR tape.

Deleting a Playlist Entry from the Playlist

VR mode

1 Press the MAIN MENU button when the disc is stopped.

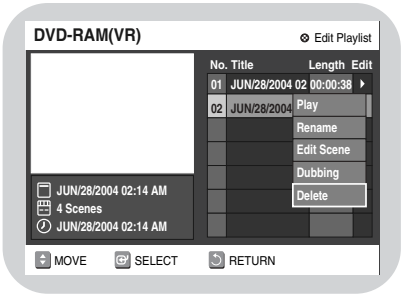
2 Press the ▲▼ button to select Playlist, and then press the ENTER or ► button.

3 Press the ▲▼ button to select Edit Playlist, and then press the ENTER or ► button, or press the MENU/PLAY LIST button on the remote control.

• The Edit Playlist screen is displayed.

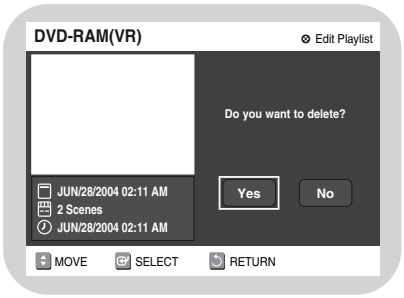
4 Press the ▲▼ button to select an entry (title) you want to delete from the Playlist, and then press the ENTER or ► button.

• The Edit Playlist menu is displayed:
Play, Rename, Edit Scene, Dubbing, Delete



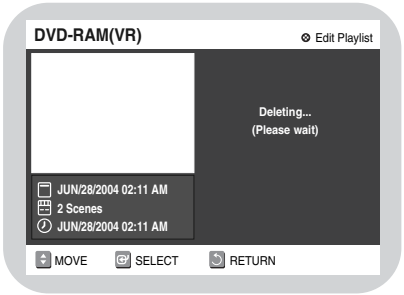
5 Press the ▲▼ button to select Delete, and then press the ENTER button.

• You will be prompted with the delete confirmation message 'Do you want to delete?'.



6 Press the ◄► buttons to select Yes, and then press the ENTER button.

• The screen returns to the Edit Playlist screen automatically after the delete operation is finished.



Disc Manager

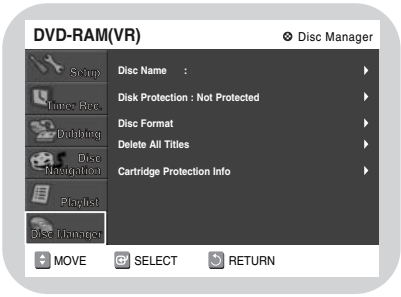
DVD-RAM DVD-RW DVD-R

Editing Disc Name

Follow these directions to give a name to a disc.

1 Press the MAIN MENU button when the disc is stopped.

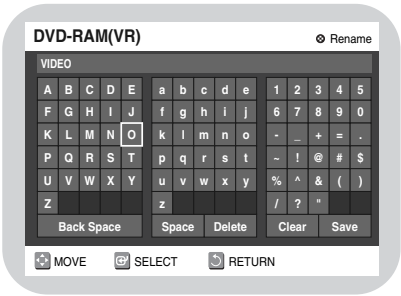
2 Press the ▲▼ button to select Disc Manager, and then press the ENTER or ► button.



3 Press the ▲▼ button to select Disc Name, and then press the ENTER or ► button.

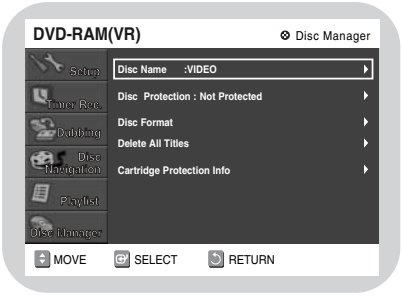
• The Edit Name screen is displayed.

4 Enter the desired characters using the DIRECTION buttons.



5 Press the DIRECTION buttons to select Save, and then press the ENTER button.

• A disc name is given to the disc.



Note

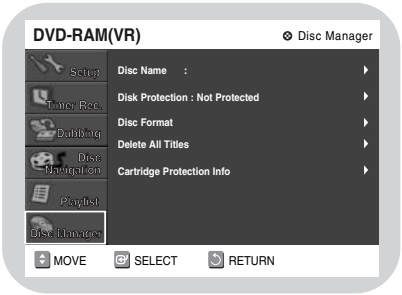
■ You may need to clear cartridge protection or unlock the protect before beginning editing.

Disc Protection

Disc Protection allows you to protect your discs from disc format or program deletion due to unintended operations.

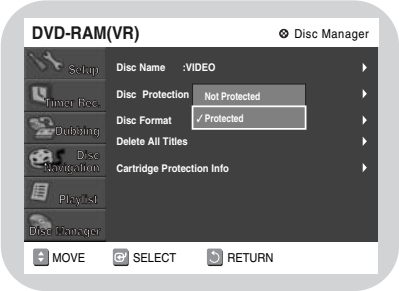
1 Press the MAIN MENU button when the disc is stopped.

2 Press the ▲▼ buttons to select Disc Manager, and then press the ENTER or ► button.

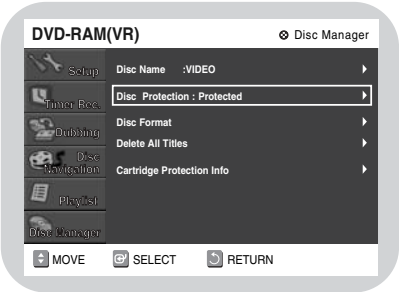


Editing

3 Press the ▲▼ buttons to select Disc Protection, and then press the ENTER or ► button.



4 Press the ▲▼ buttons to select Protected, and then press the ENTER button.



Note

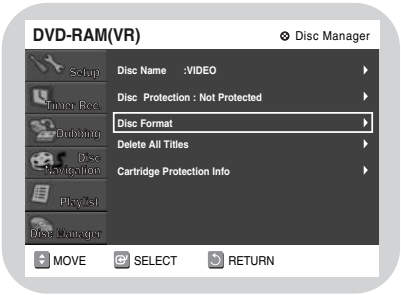
■ Disc Protection will operate only if cartridge protect is cleared.

Formatting a DVD-RAM/DVD-RW Disc

Use these instructions to format a disc. The cartridge write protect tab should be set to the unprotect position. The disc protection should also be cleared.

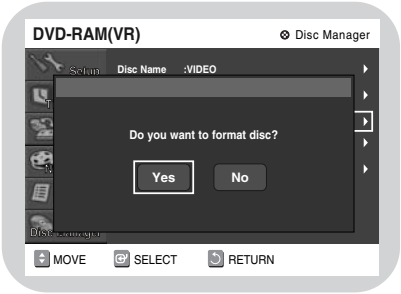
1 Press the MAIN MENU button with the disc stopped.

2 Press the ▲▼ button to select Disc Manager, and then press the ENTER or ► button.



3 Press the ▲▼ button to select Disc Format, and then press the ENTER or ► button.

- You will be prompted with the confirmation message 'Do you want to format disc?'.
- If you press ENTER you will be prompted with the confirmation message 'All data will be deleted. Do you want to continue?'.

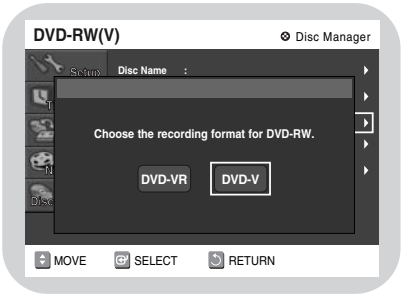


4 Press the ◀▶ buttons to select Yes, and then press the ENTER button.

• The disc is formatted.

DVD-RW

You will be prompted with the confirmation message "Choose the recording format for DVD-RW".



DVD-VR and DVD-V are defined according to their recording format

	DVD-VR	DVD-V
Editing	Possible (Partial editing is possible)	Not available
DISC	DVD-RAM DVD-RW	DVD-RW DVD-R

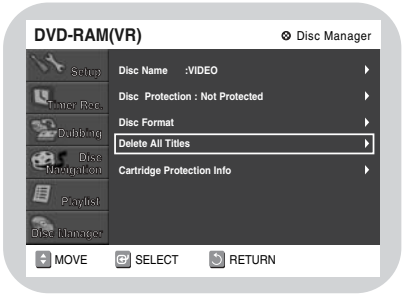
Delete All Titles

DVD-RAM DVD-RW DVD-R

Follow these instructions to delete all titles.

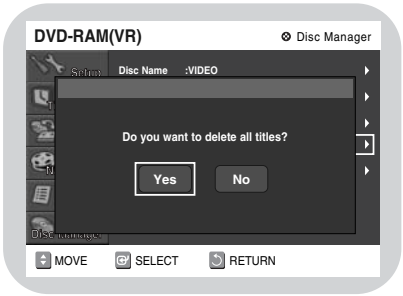
1 Press the MAIN MENU button with the disc stopped.

2 Press the ▲▼ button to select Disc Manager, and then press the ENTER or ▶ button.



3 Press the ▲▼ button to select Delete All Titles, and then press the ENTER or ▶ button.

• You will be prompted with the confirmation message 'Do you want to delete all titles?'.



• You cannot delete a protected entry.
If you want to delete a protected entry, disable Protection for it on the Lock item.
• Disc Protection: When Protected or Cartridge Protection has been set, or when a DVD-RAM is used, data cannot be deleted from a disc.

4 Press the ◀▶ buttons to select Yes, and then press the ENTER button.

• The disc is deleted.

Cartridge Protect Info (DVD-RAM)

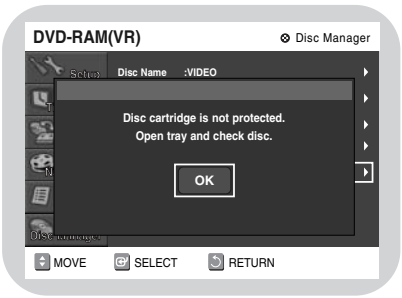
Disc Protect allows you to protect discs from disc formatting and program deletion due to unintended operations. The cartridge write protect tab should be set to the unprotect position to be able to make a recording to a DVD-RAM disc.

1 Press the MAIN MENU button with the disc stopped.

2 Press the ▲▼ button to select Disc Manager, and then press the ENTER or ► button.

3 Press the ▲▼ buttons to select Cartridge Protection Info, and then press the ENTER or ► button.

- The cartridge protection info for the disc is displayed.



Note

■ Disc Protection will operate only if cartridge protect is set to Not Protected.

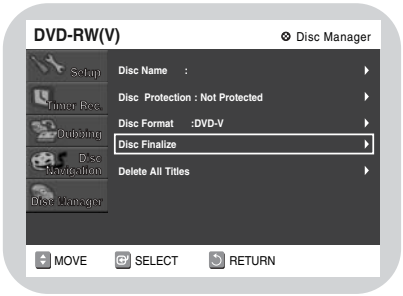
Finalizing a disc

DVD-RW DVD-R

After you record titles onto a DVD-RW/DVD-R disc with your DVD Recorder-VCR, it needs to be finalized before it can be played back on external devices.

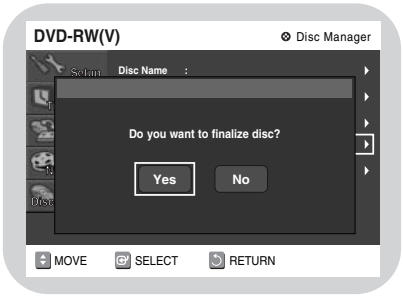
1 Press the MAIN MENU button with the disc stopped.

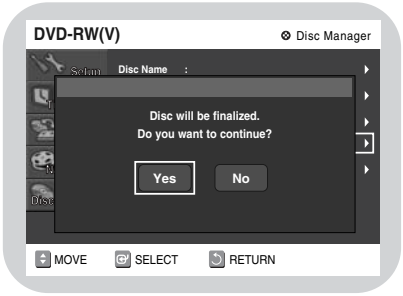
2 Press the ▲▼ button to select Disc Manager, and then press the ENTER or ► button.



3 Press the ▲▼ button to select Disc Finalize, and then press the ENTER or ► button.

- You will be prompted with the message 'Do you want to finalize disc?'. If you select Yes, you will be prompted again with the message 'Disc will be finalized. Do you want to continue?'





Press the ◀▶ buttons to select Yes, and then press the ENTER button.
• The disc is finalized.
• When finalization is complete, the tray will open.

Note

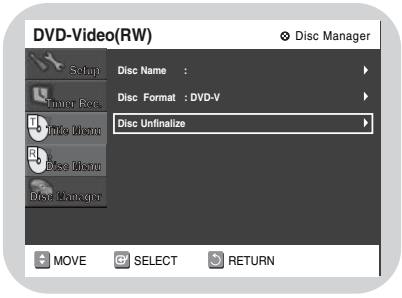
- Once a disc is finalized, you cannot delete entries from the record list.
- After being finalized, the DVD-R operates in the same manner as a DVD-Video.
- Depending on the kind of disc, the displayed screen may be slightly different.
- Finalizing will be taken few minutes. If you turn the unit on/off or open the tray during finalizing, you will not be able to use the disc anymore.

Unfinalizing a disc (V/VR mode)

DVD-RW

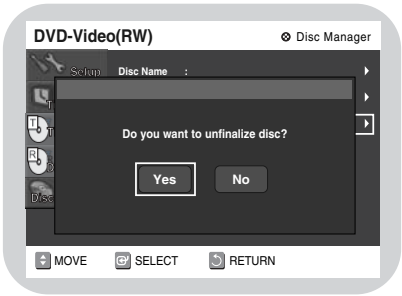
1 Press the MAIN MENU button with the disc stopped.

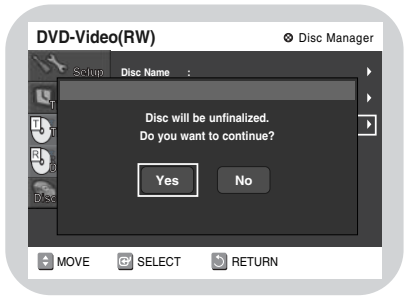
2 Press the ▲▼ button to select Disc Manager, and then press the ENTER or ▶ button.



3 Press the ▲▼ button to select Disc Unfinalize, and then press the ENTER or ▶ button.

• You will be prompted with the message 'Do you want to unfinalize disc?'. If you select Yes, you will be prompted again with the message 'Disc will be unfinalized. Do you want to continue?'





Press the ◄► buttons to select Yes, and then press the ENTER button.
• The disc will be unfinalized.

• A DVD-RW can be finalized or unfinalized in Video mode.

	Finalize	Unfinalize
Mark	DVD-VIDEO(RW)	DVD-RW(V)
Operation	Same as DVD-Video	Additional recording, protection and deletion are possible.

• A DVD-RW can be finalized or unfinalized in VR mode.

	Finalize	Unfinalize
Mark	DVD-RW(VR:F)	DVD-RW(VR)
Operation	Additional recording, deletion, editing, and protection are impossible.	Additional recording, deletion, editing, and protection are possible.

Reference

- *Troubleshooting (DVD-VIDEO/ DVD-RAM/DVD-RW/DVD-R) 101*
- *Troubleshooting 102*
- *Problems and Solutions (VCR) 103*
- *Specifications 104*

Troubleshooting (DVD-VIDEO/DVD-RAM/DVD-RW/DVD-R)

▼

Troubleshooting

▼

Problems and Solutions (VCR)

▼

Specifications

Troubleshooting (DVD-VIDEO/DVD-RAM/DVD-RW/DVD-R)

If your product malfunctions, go through the check points below before contacting a Hitachi authorized service center.

No power.	• Check whether the power cord is securely plugged into power outlet. • Did you press the power button of your DVD Recorder-VCR.
Logo is displayed for a while when the power turns on.	The DVD Recorder-VCR requires some time to be initialized after it is turned on.
Cannot record TV programs.	• Check whether the power cord is securely plugged into power outlet. • Did you set the DVD Recorder-VCR channels correctly? • Check the free space on your DVD-RAM/DVD-RW/DVD-R disc. • Check the antenna cable is connected.
Timer recording does not work properly.	• Check the recording time, end time and current time settings again. • Recording will be cancelled, if the power is removed due to a power failure or other reason during recording.
Cannot record.	• Check whether the disc is formatted. This product can record on formatted discs only. (See page 95.) • Is the DVD-RAM cartridge protected? Set the write protect tab to the unprotect position. • Check whether your DVD-RAM/DVD-RW/DVD-R disc has a sufficient free space.
I pressed the REC button but there is no response.	Recording is available on DVD-RAM/DVD-RW/DVD-R discs only. If a program is copy protected, you cannot record it.
I forgot the password for parental care.	Press the ◀◀ and ▶▶ buttons of your DVD Recorder-VCR at the same time when the power is on. All settings including password will revert to factory settings. Do not use it if not absolutely required. (Note that this function is available only when there is no disc inserted.)
Cannot play the disc.	• Check whether the disc is inserted correctly with the label facing up. • Check the regional code of your DVD disc. • This DVD Recorder-VCR cannot play some types of disc. (See page 6.)
No sound.	• Are you watching a program in slow or skip mode? If you are playing a program at a speed other than normal speed, sound is not output. • Check the connections and initial settings. • Check whether the disc is damaged. Clean the disc, if necessary. • Check whether the disc is inserted correctly with the label facing up.

Troubleshooting

⃠ icon appears on the screen.	You cannot use the operation or function due to one of the following reasons: (1) Your DVD disc does not support the feature (for example, angles) (2) You've requested a title, chapter, or scan time that is out of the correct range.
Play mode settings are different from the settings configured with the setting menu.	The disc does not support all the selected functions. In this case, some settings you configure on the setting menu may not work properly.
Cannot change the aspect ratio.	Aspect ratio is fixed for DVD disc.
No audio output.	Check whether you selected correct digital output options in the Audio Output Options menu.
No video or audio output. The disc tray is ejected after 2 to 5 seconds.	Did you move your DVD Recorder-VCR suddenly from a cold place to a warm place? In this case, remove discs and wait for one to two hours with the power on, and then, insert the disc and try to play it again. It will work properly when condensation is removed.
Angle operation does not work during playback of a DVD disc.	Angle operation is available only when the disc contains the images captured at different angles.
The disc revolves, but no image or bad quality images are output.	• Check whether there is damage or foreign materials on your disc. • Some discs with bad manufacturing quality may not be played back. • If the scene changes from dark to bright suddenly, the screen may jitter temporarily, but it is not a defect.
Desired sound language and subtitle language are not played.	Sound languages and subtitle languages are disc-specific. Only the sound and subtitle languages contained on a DVD disc are available and displayed in the disc menu.
No progressive (480P) output.	• Check whether “480P” is displayed on front panel. • Make sure to change the component video output using the Progressive button when the disc is stopped.
The remote control doesn't work.	• Point the remote control at the remote control sensor on your DVD recorder-VCR. Operate within distance. (15ft) Remove obstacles between the DVD Recorder-VCR and remote control. • Check whether the batteries are dead.
Other problems	• Read the table of contents and then find and read the sections describing your problem, and follow the directions given. • Turn the unit off and on. • If your problem still persists, contact a nearby Hitachi service center.

Problems and Solutions (VCR)

Before contacting a Hitachi authorized service center, perform the following simple checks.

Problem	Explanation/Solution
No power	◆ Check that the power plug is connected to a wall outlet. ◆ Have you pressed the POWER button?
You cannot insert a video cassette	◆ A video cassette can only be inserted with the window side up and the safety tab facing you.
A television program was not recorded	◆ Check the DVD Recorder-VCR antenna connections. ◆ Is the DVD Recorder-VCR tuner properly set? ◆ Check if the safety tab is intact on the cassette.
Timer recording was unsuccessful	◆ Re-check the recording start/stop time settings and the current time ◆ Check whether you insert a tape which has enough time record
No playback picture or the picture is distorted	◆ Check to see if you are using a prerecorded tape.
You cannot see normal broadcasts Noise bars or streaks on playback	◆ Check the TUNER/EXTERNAL setting. ◆ Check the TV antenna connections. ◆ Press the DVD CHANNEL ▲ or ▼ buttons to minimize this effect.
When the PAUSE button is pressed during playback, the still picture has severe “noise bar” streaks	◆ A still picture may have “noise bars”, depending on the condition of the tape. Press the DVD CHANNEL ▲ or ▼ buttons during SLOW motion to minimize this effect.
Video Head Cleaning	◆ If poor pictures appear on a variety of cassettes, the video heads may need cleaning. This is a common problem, and unless it appears, the heads should not be cleaned. When cleaning the video heads, read all instructions provided with the head cleaning cassette. Incorrect head cleaning can permanently damage the video heads.

If you are unable to solve the problem after reading the above instructions, note:

- **The model and serial number on the rear of your DVD Recorder-VCR**
- **The warranty information**
- **A clear description of the problem**

Then contact your nearest Hitachi authorized service center.

Specifications

General	Power requirements	120V AC, 60 Hz
	Power consumption/Standby power (W)	45 Watts/5.1 Watts
	Weight	Approx. 5.3 kg (11.6 lb)
	Dimensions	Approx. 430 mm (W) x 333 mm (D) x 84 mm (H) [Approx. 16.9 in (W) x 13.1 in (D) x 3.3 in (H)] (excluding projections)
	Operating temp.	+5°C to +40°C (+41°F to +104°F)
	Operating humidity	10%–80% RH (no condensation)
Input	Video	1.0 Vp-p at 75 Ω load, sync negative S-Video input (Y: 1.0 Vp-p, C: 0.286 Vp-p at 75 Ω load)
	Max. Audio Input Level	2Vrms
	DV Input	IEEE 1394(4p) compatible jack
	Receivable Channels	Regular TV broadcasting: VHF (2~13), UHF (14~69) Cable TV broadcasting: 1~125
Output	Audio	Audio input jacks 1, 2 Optical/Coaxial digital audio output
	Video	Video input jacks 1, 2 S-Video output 1 (Y: 1.0 Vp-p, C: 0.286 Vp-p at 75 Ω load) Component outputs (Y: 1.0 Vp-p, Pb: 0.70 Vp-p, Pr: 0.70 Vp-p at 75 Ω load)
DVD	Picture Compression format	MPEG-II
	Audio Compression format	Dolby AC-3 256kbps
	Recording time	Max (6 hours) (using 4.7 GB disc): XP (60 min), SP (120 min), LP (240 min), EP (360 min)
	Video S/N Ratio	Min. 50 dB at standard recording
	Audio S/N Ratio	Min. 75 dB
	Audio frequency characteristics	20 Hz ~ 20 kHz

Audio Output
For DVD discs, audio signals recorded at 96 kHz sampling frequency are converted into and output at 48 kHz digital signal.

Disc Type	DVD	VIDEO-CD	AUDIO CD(CDDA)
Analog Audio Output	48 / 96 kHz	44.1 kHz	44.1 kHz
Digital Audio Output	48 kHz	44.1 kHz	44.1 kHz

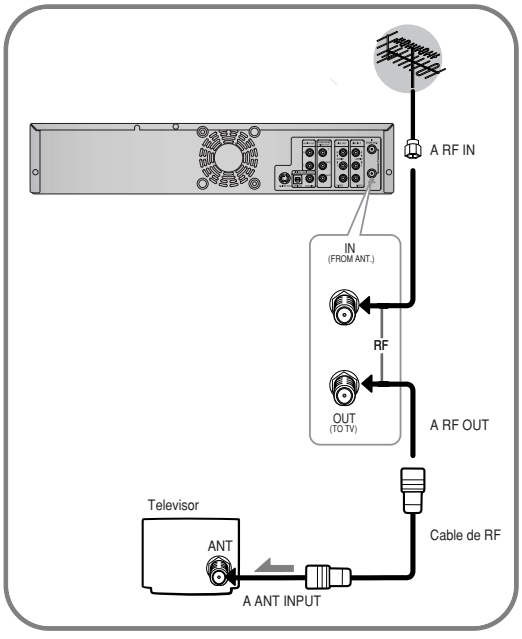
Conexión del cable de antena

Existen varias formas de conectar su videograbadora con DVD. Seleccione, entre las siguientes, la conexión de antena más adecuada a sus necesidades.

- Método 1:Antena + Videograbadora con DVD + Televisor: Sin adaptador para cablevisión
- Método 2: Antena + Adaptador para cablevisión + Videograbadora con DVD + Televisor: Adaptador para cablevisión con muchos canales codificados
- Método 3: Antena + Videograbadora con DVD + Adaptador para cablevisión + Televisor: Adaptador para cablevisión con unos pocos canales codificados

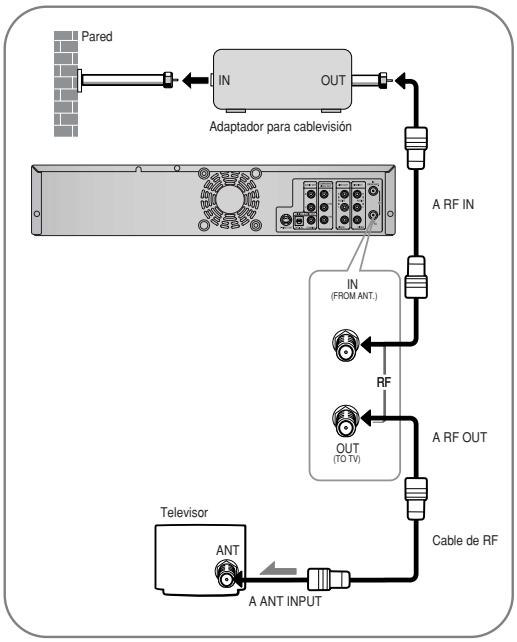
Método 1: Antena + Videograbadora con DVD + Televisor: Sin adaptador para cablevisión

Usted podrá grabar canales no codificados seleccionando el canal en el videograbadora con DVD. Además podrá utilizar este método si desea contemplar canales sin adaptador para cablevisión.



Método 2: Antena + Adaptador para cablevisión + Videograbadora con DVD + Televisor: Adaptador para cablevisión con muchos canales codificados

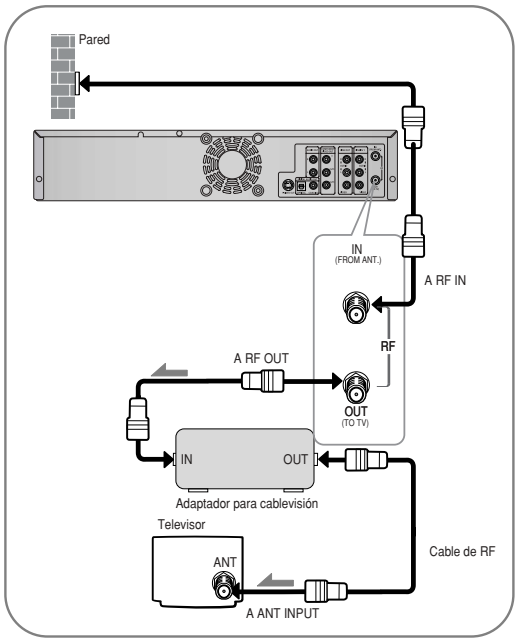
Usted podrá grabar canales seleccionándolos en el adaptador para cablevisión. No podrá grabar un canal durante la contemplación de otro. Cerciórese de que la alimentación del adaptador para cablevisión esté conectada.



Español

Método 3: Antena + Videograbadora de DVD + Adaptador para cablevisión + Televisor: Adaptador para cablevisión con unos pocos canales codificados

Usted podrá grabar canales no codificados seleccionándolos en el adaptador para cablevisión. No podrá grabar canales codificados que necesiten un adaptador para cablevisión.



Conexión del cable de vídeo

Existen varias formas de conectar su videograbadora con DVD. Seleccione el método de conexión de vídeo adecuado a sus necesidades.

- Método 1: Conexión a una toma de entrada de vídeo
- Método 2: Conexión a una toma de entrada de vídeo S
- Método 3: Conexión a tomas de entrada de vídeo de componentes en el modo 525i/480i
- Método 4: Conexión a tomas de entrada de vídeo compuesto en el modo 525p/480p

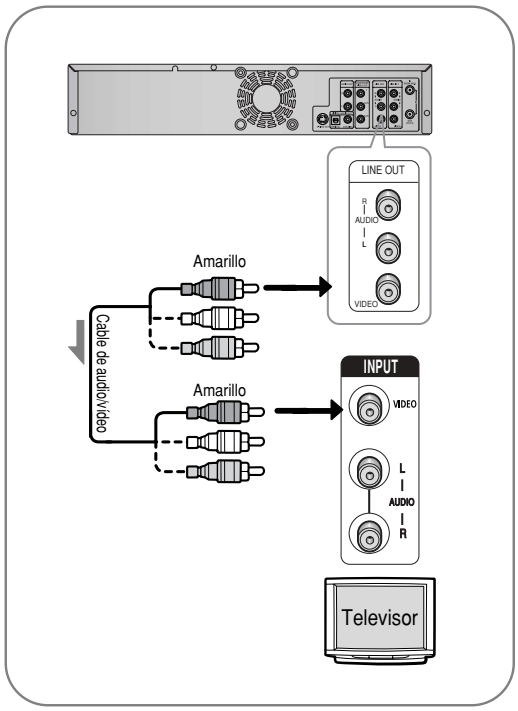
Modos de vídeo S, vídeo de componentes, y salida progresiva

- La salida de vídeo S y de vídeo de componentes solamente estará disponible si su televisor es compatible con la entrada de vídeo S o la entrada de vídeo de componentes, respectivamente. Si la entrada de vídeo S o la de vídeo de componentes no trabaja, compruebe las conexiones del televisor y los ajustes de selección de entrada del televisor.
- En comparación con el vídeo entrelazado estándar, la exploración progresiva duplica la cantidad líneas de barrido de vídeo aplicadas a su televisor, lo que resulta en una imagen más clara que en el caso del vídeo entrelazado. La toma de salida de vídeo de exploración progresiva se utiliza en el modo de salida progresiva. Esto solamente estará disponible en televisores compatibles con la exploración progresiva.
- Los usuarios tendrán que tener en cuenta que no todos los televisores de alta definición son completamente compatibles con este producto, motivo por el que la imagen puede mostrar efectos raros. Si experimenta problemas en la exploración progresiva de 525, se le recomienda que cambie la conexión a la salida de definición estándar.

Método 1: Conexión a una toma de entrada de vídeo

Conecte un cable de vídeo (amarillo) entre la toma OUT (amarilla) de la videograbadora con DVD y la toma VIDEO IN (amarilla) del televisor (o amplificador de audio/vídeo).

- Usted podrá disfrutar de imágenes de calidad normal.
- Conecte los cables de audio (blanco y rojo) entre las tomas ANALOG AUDIO OUT de la videograbadora con DVD y las tomas AUDIO IN del televisor (o amplificador de audio/vídeo)

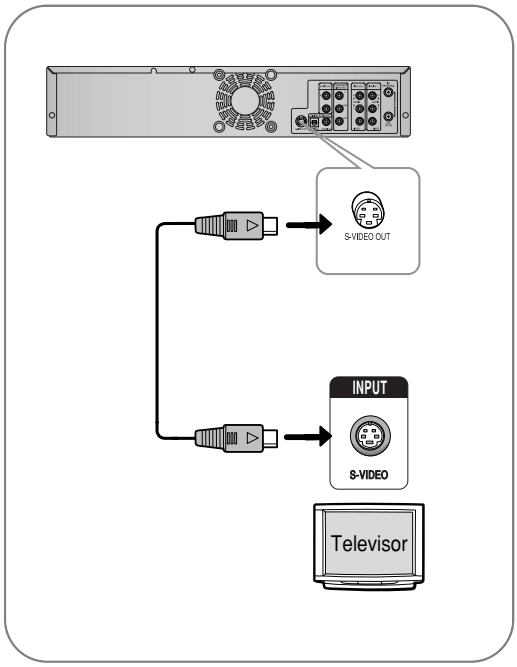


Español

Método 2: Conexión a una toma de entrada de vídeo S

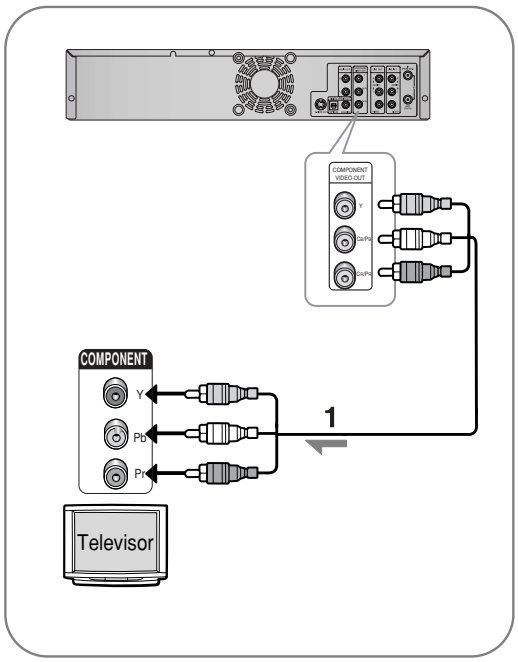
Conecte un cable de vídeo S (no suministrado) entre la toma S-VIDEO OUT de la videograbadora con DVD y la toma S-VIDEO IN del televisor (o amplificador de audio/vídeo).

• Usted podrá disfrutar de imágenes de gran calidad.



Método 3: Conexión a tomas de entrada de vídeo de componentes (Y, CB/PB/ CR/PR) en el modo 525i/480i

1. Conecte cables de vídeo de componentes (no suministrados) entre las tomas COMPONENT VIDEO OUT de la videograbadora con DVD y las tomas COMPONENT VIDEO IN del televisor (o amplificador de audio/vídeo).
2. Cerciórese de que el disco se haya parado completamente antes de cambiar el modo.
   Si no aparece nada en el visualizador del panel frontal, éste será el modo 525i/480i.



• Usted podrá disfrutar de reproducción en color de gran calidad.

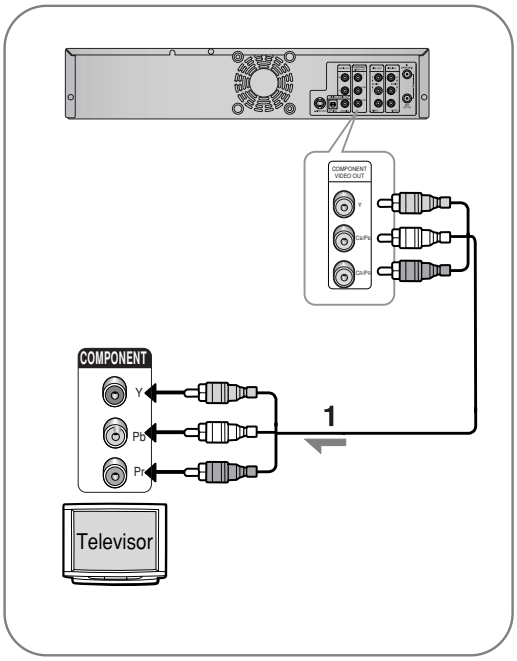
Español

Método 4: Conexión a las tomas de entrada de vídeo de componentes (Y, CB/PB, CB/PB) en el modo 480p

Su televisor deberá ser compatible con la entrada de exploración progresiva para permitirle contemplar la salida de vídeo de 480p.

1. Conecte cables de vídeo de componentes (no suministrados) entre las tomas COMPONENT VIDEO OUT de la videograbadora con DVD y las tomas COMPONENT VIDEO IN del televisor (amplificador de audio/vídeo).

2. Presione el botón Progresive del panel frontal. Se visualizará el mensaje. Si desea el modo 525P/480P, seleccione Sí. Si en el visualizador del panel frontal se visualiza "480P", su videograbadora con DVD funcionará en el modo 525P/480P. Cerciórese de que el disco se haya parado completamente antes de cambiar de modo.



Memoria automática de canales

La función de memoria automática de canales buscará y almacenará automáticamente todos los canales activos de su zona.

1 Abra "MENÚ".

Con el DVD en el modo de parada, presione el botón MAIN MENU.

2 Seleccione "Configurac."

Utilizando los botones ▲▼, mueva la barra de selección hasta "Configurac." y después presione el botón ► o ENTER para seleccionar.

3 Seleccione "Ajuste de Canales".

Utilizando los botones ▲▼, mueva la barra de selección hasta "Ajuste de Canales" y después presione el botón ► o ENTER para seleccionar.

4 Ejecute "Memoria Automática de Canales"

Mueva la flecha de selección hasta "Memoria Automática de Canales", y después presione el botón ENTER para seleccionar.

- La videograbadora con DVD buscará automáticamente todos los canales disponibles en la banda del sintonizador seleccionada. Este procedimiento tardará algunos minutos en completarse.
- Cuando finalice, se visualizará el canal más bajo encontrado.
- Para parar o cancelar la exploración, presione el botón ENTER.

Ajuste de los canales guía

Configure estos canales guía a fin de poder utilizar los códigos de VCR Plus+ para la grabación con temporizador. Antes de iniciar la configuración, prepare una tabla que indique los canales, los nombres de las emisoras, y los canales guía.

1 **Abra "MENÚ".**

Con el DVD en el modo de parada, presione el botón MAIN MENU.

2 **Seleccione "Configurac."**

Utilizando los botones ▲▼, mueva la barra de selección hasta "Configurac." y después presione el botón ENTER para seleccionar.

3 **Seleccione "Ajuste de Canales".**

Utilizando los botones ▲▼, mueva la barra de selección hasta "Ajuste de Canales" y después presione el botón ENTER para seleccionar.

4 **Seleccione "Ajuste de VCR Plus+".**

Mueva la barra de selección hasta "Ajuste de VCR Plus+".

5 **Seleccione el canal guía que desee ajustar.**

6 **Cambie "CH DE TV".**

Utilice los botones ▲▼, para seleccionar el canal de televisión correspondiente al canal guía y presione ENTER.

- Repita los pasos 5 y 6 las veces que sean necesarias.

Nota

■ Para volver al menú anterior, presione el botón RETURN. Para salir del menú principal, presione el botón MAIN MENU.

Reproducción de un disco

1 Presione el botón OPEN/CLOSE.

2 Coloque suavemente un disco en la bandeja con la etiqueta encarada hacia arriba.

3 Presione el botón OPEN/CLOSE para cerrar la bandeja del disco.

- La videograbadora con DVD cerrará la bandeja del disco e iniciará automáticamente la reproducción del mismo.
- Cuando utilice medios grabables (DVD-RAM, DVD-RW, DVD-R, etc.), la reproducción automática no podrá iniciarse sin presionar el botón PLAY. Cuando presione el botón POWER mientras haya un disco en la bandeja, la unidad se activará. Para iniciar la reproducción, presione el botón PLAY.
- Si inserta un disco MP3, la videograbadora con DVD visualizará la lista de archivos en la pantalla e iniciará la reproducción.
- Cuando inserte un disco JPEG, las carpetas y la lista de archivos se visualizarán en formato de álbum.

4 Para parar la reproducción, presione el botón STOP.

Nota

■ Cuando pare la reproducción de un disco, la videograbadora con DVD recordará el punto de parada, de forma que cuando vuelva a presionar el botón PLAY, volverá al tal punto (a menos que haya extraído el disco, desconectado la alimentación de la videograbadora, con DVD o presionado dos veces el botón STOP). Esta función solamente se aplicará a discos DVD-VIDEO, DVD-RAM, DVD-RW, DVD-R, o CD de audio (CD-DA).

Precauciones

- No mueva su videograbadora con DVD mientras esté reproduciendo, porque podría dañar el disco.
- Cerciórese de presionar el botón OPEN/CLOSE para abrir o cerrar la bandeja del disco.
- No empuje la bandeja del disco mientras esté abriendo o cerrándose, ya que podría causar el mal funcionamiento de la videograbadora.
- No coloque materiales extraños en la bandeja del disco.
- Algunas funciones pueden trabajar de forma diferente o estar inhabilitadas dependiendo del tipo de disco. Cuando ocurra esto, consulte las instrucciones escritas en la caja del disco.
- Tenga especial cuidado para que los dedos de los niños no queden pillados entre la bandeja del disco y el chasis cuando se cierre.
- Después de haber conectado la alimentación, se tardarán algunos segundos hasta que funcione el DVD.

Utilización de marcadores/marcas

Coloque marcas en las escenas que desee contemplar de nuevo a fin de poder iniciar la reproducción desde las posiciones marcadas.

Colocación de un marcador

1 Presione el botón MARKER durante la reproducción.

2 Cuando aparezca la escena deseada, presione el botón ENTER.
- Se visualizará el número 1, y la escena se memorizará.

3 Para moverse a la posición siguiente, presione el botón ►.

4 Cuando aparezca la escena deseada, vuelva a presionar el botón ENTER.
- Se visualizará el número 2 y la escena se memorizará. Repita este procedimiento para marcar otras posiciones. Usted podrá marcar hasta 99 escenas.

Marcación con un disco DVD-R, DVD-RW(VIDEO) c DVD-VIDEO

- Si reproduce un disco DVD-RAM/DVD-RW(VR), la pantalla visualizará “Bookmark” en vez de “Marca”.
- Usted podrá marcar hasta 10 escenas.

Reproducción desde un marcador

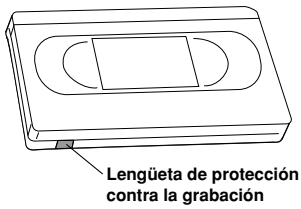
1 Presione el botón MARKER durante la reproducción.

2 Presione los botones ◄► para seleccionar la escena marcada.

3 Presione el botón ENTER para iniciar la reproducción desde la escena seleccionada.

Reproducción de la videograbadora

Para reproducir un videocasete VHS estándar, simplemente insértelo en la videograbadora y presione el botón PLAY. Usted podrá activar la función de reproducción automática para hacer que la videograbadora reproduzca automáticamente cuando inserte un videocasete que carezca de lengüeta de protección contra la grabación.



1 Inserción del videocasete VHS

Inserte un videocasete VHS estándar en la videograbadora.
- Cuando inserte el videocasete, la alimentación se conectará automáticamente.

2 Reproducción del videocasete

Presione el botón PLAY del mando a distancia o del panel frontal de la unidad. El videocasete comenzará a reproducirse automáticamente si carece de lengüeta de protección contra la grabación y está activada la función de reproducción automática.

3 Parada de la reproducción

Presione el botón STOP del mando a distancia o del panel frontal de la unidad.

Nota

■ Presione el botón DVD/VCR de la videograbadora con DVD, o presione el botón VCR del mando a distancia para elegir “VCR”. En el visualizador aparecerá “VCR”.

Español

Seguimiento

El ajuste del seguimiento elimina las líneas blancas que aparecen a veces durante la reproducción debido a ligeras diferencias en las videograbadoras para grabación. Los botones DVD CHANNEL alinearán automáticamente las pistas grabadas con las cabezas de reproducción para resolver este problema. Usted también podrá realizar manualmente el ajuste del seguimiento.

1 Ajuste manual del seguimiento

Durante la reproducción, presione los botones DVD CHANNEL ∧/∨ para eliminar las líneas blancas de la imagen.

Funciones especiales de reproducción de la videograbadora

Cuando esté reproduciendo un videocasete, podrá disfrutar de gran variedad de funciones de reproducción especiales, incluyendo imagen fija, avance por fotogramas, búsqueda, cámara lenta, etc. Para reanudar la reproducción normal, vuelva a presionar el botón PLAY.

1 Pausa

En el modo de reproducción, presione el botón PAUSE para obtener una imagen fija.

2 Avance por fotogramas

En el modo de pausa, presione el botón ▶▶| SKIP para avanzar al fotograma siguiente.

3 Reproducción progresiva/regresiva rápida

En el modo de reproducción, presione el botón ▶▶ (reproducción progresiva rápida) o ◀◀ (reproducción regresiva rápida) para reproducir a dos velocidades:

- Búsqueda de imágenes — Presione y suelte el botón para hacer que la cinta avance o retroceda a 5 veces la velocidad normal.
- Búsqueda rápida — Mantenga presionado el botón para hacer que la cinta avance o retroceda a 7 veces la velocidad normal.

4 Cámara lenta

En el modo de pausa, presione el botón ▶▶ para reproducir a cámara lenta. Presione repetidamente el botón ▶▶ para variar la reproducción a cámara lenta de 1/5 a 1/30 de la velocidad de reproducción normal. Para reanudar la reproducción a velocidad normal, presione dos veces el botón PLAY.

Utilización de los códigos VCR Plus+ para realizar grabaciones con el temporizador

La introducción de los códigos VCR Plus+ es una forma muy fácil de programar la videograbadora para grabación. Usted podrá encontrar estos códigos en guías y revistas de televisión.

1 **Presione el botón MAIN MENU.**

2 **Presione los botones ▲▼ para seleccionar Grab. Temp. y después presione el botón ENTER o ►.**

3 **Presione los botones ▲▼ para seleccionar Ajuste de VCR Plus+ y después presione el botón ENTER o ►.**

4 **Usted podrá introducir directamente el código VCR Plus+ utilizando los botones numéricos.**

- Para retroceder y corregir un dígito, presione el botón ◄ .

5 **Presione el botón ENTER.**

- Se visualizarán los elementos de introducción de la grabación con temporizador.

6 **Confirme el programa y, si es necesario, realice correcciones utilizando los botones ▲▼◄► y después presione el botón ENTER.**

- Usted podrá realizar la introducción directamente utilizando los botones numéricos.

7 **Presione el botón POWER.**

En el visualizador de la videograbadora se encenderá "(◷)".

Nota

- Si presiona el botón VCR Plus+ del mando a distancia en el modo de parada, la pantalla actual cambiará directamente a la de introducción de códigos VCR Plus+.
- Dependiendo del tipo de disco, la pantalla mostrada arriba puede tener un aspecto diferente.
- El tiempo real de grabación puede ser mayor que el programado cuando se graben programas de televisión utilizando VCR Plus+.
- El número máximo de programas que podrán utilizarse para el temporizador es de 12.

Contemplación con Navegación de disco

DVD-RAM DVD-RW DVD-R

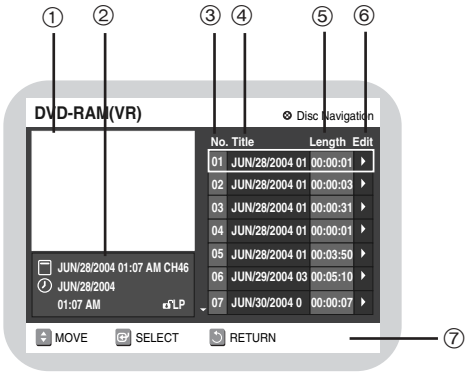
Usted podrá reproducir los títulos grabados, editar un nombre de título, editar las introducciones de la lista de grabación, y bloquear o desbloquear la lista de grabación.

1 Presione el botón MAIN MENU.

Nota

■ Navegación de disco: Un título se refiere a un flujo de vídeo grabado.
La Navegación de disco mostrará una lista que le ayudará a seleccionar un título. Como la lista de títulos se compone de la información sobre los datos actualmente grabados, si se borra un título, éste no podrá volver a reproducirse.

2 Presione el botón ▲▼ para seleccionar la Navegación de disco y después presione el botón ENTER o ►, o presione el botón TOP MENU/DISC NAVIGATION del mando a distancia.
• Se visualizará la pantalla de Navegación de disco.



① Pantalla de reproducción para introducciones grabadas
② Ventana de información para la introducción seleccionada: Nombre del título, fecha de grabación, hora de grabación, estado de bloqueo, modo de grabación
③ Núm. de introducción grabada
④ Título de introducción grabada
⑤ Duración de la grabación
⑥ Elementos de edición de la lista de grabación
⑦ Visualización de botones

Elementos de edición de la lista de grabación

1 Presione el botón ▲▼ para seleccionar la introducción que desee editar, y después presione el botón ENTER o ►.

- Reproducir: Reproduce la introducción seleccionada.
- Camb. Nomb.: Cambia el nombre del título de la introducción seleccionada.
- Eliminar: Borra la introducción seleccionada de la lista.
- Modificar: Borra la sección deseada. (DVD-RAM/DVD-RW (modo VR)
- Proteger: Bloquea o desbloquea la introducción seleccionada.
- Nav. Escena: Permete al usuario visualizarse una lista de las escenas grabadas en el disco con una videocámara y también de las escenas con marcadores unirse al programa grabado con este videograbadora con DVD.
- Nav. Tiempo: Permete al usuario seleccionar las escenas deseadas en unidades de un minuto de la lista de los programas grabados (Navegación de disco) y luego las reprodicir.

2 Después de haber finalizado la operación, vuelva a presionar el botón MAIN MENU. La pantalla del menú desaparecerá.

Español

Reproducción con Navegación de disco

Para reproducir una introducción de Navegación de disco, realice lo siguiente.

1 Presione el botón MAIN MENU.

2 Presione el botón ▲▼ para seleccionar la Navegación de disco y después presione el botón ENTER o ►, o presione el botón TOP MENU/DISC NAVIGATION del mando a distancia.

• Se visualizará la pantalla de la Navegación de disco.

3 Presione el botón ▲▼ para seleccionar la introducción que desee reproducir de Navegación de disco, y después presione el botón ENTER o ►.

• Se visualizará el menú de la Navegación de disco.

4 Presione el botón ▲▼ para seleccionar Reproducir, y después presione el botón ENTER.

• Se reproducirá la introducción (o el título) que haya seleccionado.

Nota

■ Usted también podrá reproducir un programa grabado presionando el botón FUNCTIONS y utilizando los elementos título, capítulo, u hora.

Borrado de una introducción de la Navegación de disco

Para borrar una introducción de la Navegación de disco, realice lo siguiente.

1 Presione el botón MAIN MENU.

2 Presione el botón ▲▼ para seleccionar la Navegación de disco y después presione el botón ENTER o ►, o presione el botón TOP MENU/DISC NAVIGATION del mando a distancia.

• Se visualizará la pantalla de la Navegación de disco.

3 Presione el botón ▲▼ para seleccionar la introducción que desee borrar de la pantalla de la Navegación de disco, y después presione el botón ENTER o ►.

• Se visualizará el menú Editar la Navegación de disco.

4 Presione el botón ▲▼ para seleccionar Borrar, y después presione el botón ENTER.

• Usted no podrá borrar una introducción protegida. Si desea borrar una introducción protegida, seleccione “OFF” en el menú de protección.

Nota

■ Tenga cuidado porque no podrá recuperar ninguna introducción que haya borrado de la Navegación de disco.

5 Presione el botón ◄► para seleccionar Sí, y después presione el botón ENTER.

HITACHI

To locate an authorized HITACHI service facility in the continental U.S.A

DIAL TOLL FREE
7 days a week,24 hours a day

800 HITACHI

1-800-448-2244

Hitachi has made every effort to assure you hours of trouble free operation from your unit. However, should you require service, a network of Hitachi Authorized Service Facilities has been established in all 50 states and Puerto Rico. Each facility will provide you with convenient and expedient assistance. Our service "Hot line" operator will direct you to the Hitachi Authorized Service Facility nearest you. Just present proof of purchase and/or delivery receipts to the Hitachi Authorized Service Facility and service will be rendered in accordance with the terms of the limited warranty as stated on your warranty card or operating guide.

Should you have any questions regarding in-warranty service, operation or technical assistance, please contact:

HITACHI AMERICA, LTD.
HOME ELECTRONICS DIVISION

900 Hitachi way,
Chula Vista, CA 91914-3556
Tel: 1-800-HITACHI
(1-800-448-2244)

HITACHI CANADA LTD.
DIGITAL MEDIA DIVISION

2495 Meadowpine Blvd., Mississauga,
Ontario L5N 6C3 CANADA
Tel: 1-800-HITACHI
(1-800-448-2244)

during the business hours
Monday - Friday EST 9:00am~7:00pm
Saturday EST 9:00am~5:00pm

durant les heures de hureau:
Lundi au Vedredi 9:00am~7:00pm (h.n.e.)
Samedi 9:00am~5:00pm (h.n.e.)

Warranty Limitations

The Limited Warranty provided by Hitachi does not cover:

A. Cabinet (exterior finish items), Battery packs, Accessories, Lens Cleanings, Head Cleanings, DVD Disc Damage, Video Tape Damage, or Software Modifications.
B. Any defect, malfunction, or failure caused by or resulting from improper service, maintenance, repair, use of DVD Cleaning Disks, use of Video Cleaning Cassettes, software, or from abuse, neglect, accident or any other cause beyond the control of Hitachi
C. Unpacking, set-up or installation, adjustment of customer operated controls, user instruction.
D. Any product with Serial Numbers altered or removed
E. New products purchased or service performed outside of the continental United States or its possessions
F. Product used for a commercial or industrial purpose.

NO PERSON, AGENT, DISTRIBUTOR, DEALER, SERVICE FACILITY, OR COMPANY IS AUTHORIZED TO CHANGE, MODIFY, OR AMEND THE TERMS OF THIS LIMITED WARRANTY IN ANY MANNER OR FASHION WHATSOEVER, EXCEPT AND TO THE EXTENT PROVIDED IN THIS LIMITED WARRANTY, HITACHI MAKES NO EXPRESS WARRANTY REGARDING THIS HITACHI PRODUCT. FURTHER, ALL IMPLIED WARRANTIES RELATING TO ANY PORTION OF THIS PRODUCT, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO 90 DAYS FOR LABOR AND ONE YEAR FOR PARTS, THE DURATION OF THE APPLICABLE EXPRESS WARRANTY CONTAINED ABOVE. HITACHI SHALL NOT BE LIABLE TO THE PURCHASER OR TO ANY OTHER PERSON FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSS OF PROFIT OF PRODUCT RESULTING FROM ANY DEFECT IN OR MALFUNCTION OR FAILURE OF THIS HITACHI PRODUCT. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, OR THE EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

Important Notice:

Retain your sales receipt for warranty purposes. Please complete the section below for your records as it may be needed in the event of loss.

Attach your sales receipt to this card.

DVD, VCR, Camcorder Products, AC Adapter Charger Limited Warranty Registration

(for your records)

Model No. _____

Serial No. _____

Date of Purchase _____

Dealer Name _____

Dealer Address _____

City _____ State _____ Zip _____

NOT SOLD IN U.S.A. ONLY
NOT SOLD IN CANADA

HITACHI

REGISTER YOUR PRODUCT ON-LINE AT
HITACHI.COM/TV
OR MAIL IN TO ADRESS ON THIS CARD.

HITACHI

"In order to allow Hitachi to better serve customer needs, please complete this card and return it to Hitachi America, Ltd., Home Electronics Division. Completion of this card is not required in order to validate your Hitachi limited warranty, but would assist us in developing better services and programs for our customers."
(Please print or type)

Model No. _____

Serial No. _____ Date of purchase

Customer Name _____

Customer Address _____

City _____ State Zip

( )
Phone No.

Dealer name _____

Dealer address _____

City _____ State Zip

HITACHI

Hitachi America, Ltd.
Home Electronics Division

LIMITED WARRANTY

Hitachi America, Ltd., Home Electronics Division ("Hitachi,") warrants this component in duration as stated below:

- ***DVD Products***
- ***VCR Products***
- ***CAMCORDER Products***
- ***AC ADAPTER CHARGER***

- **90 DAYS LABOR (Carry-in)**
- **1 YEAR PARTS (Except Battery)**

Conditions of Hitachi Limited Warranty

These Hitachi Products are warranted to be free of defects in parts and workmanship at the time of purchase by the original owner. If this product is found to be defective, Hitachi will repair or replace defective parts at no charge to the original owner. Parts used for replacement are warranted for the remainder of the original Limited Warranty period. For 90 days from the date of original purchase, Hitachi will provide labor for the repair or replacement of defective parts without charge, subject to the following conditions:

1. Owner must provide verification of the date of purchase when requesting Limited Warranty Service. (Dated Sales Receipt Required)
2. All repairs must be performed by a Hitachi Authorized Service Facility.
3. This warranty is valid only in the U.S.A.

For information concerning repairs, operation, technical assistance or for referral to the location of your nearest Authorized Service Facility or Parts Distributor, call: 1-800-HITACHI (1-800-448-2244)

HITACHI AMERICA, LTD.
HOME ELECTRONICS DIVISION
900 Hitachi Way
Chula Vista, CA 91914-3556
Tel: 1-800-HITACHI

REGISTER YOUR HITACHI PRODUCT ON-LINE AT HITACHI.COM/TV

(Continued on reverse side)

U.S.A. ONLY
NOT VALID IN CANADA

QT15271

Register your product on-line at hitachi.com/tv
or mail this portion to the following address

Attn: Warranty Department
Hitachi America, Ltd., Home Electronics Division
900 Hitachi Way
Chula Vista, CA 91914-3556

HITACHI CANADA LTD.
DIGITAL MEDIA DIVISION

HITACHI WARRANTY POLICY

HITACHI VIDEO PRODUCTS are guaranteed to be free from defects in workmanship and material. If any failure resulting from either workmanship or material defect should occur under normal and proper usage within the period stated hereunder from the original provable date of purchase, such failure should be repaired at no cost to the buyer, provided the defective product is brought to a HITACHI AUTHORIZED SERVICE CENTER in Canada.

IMPORTANT: KEEP THIS WARRANTY CARD AND ATTACH IT TO YOUR BILL OF SALE FOR FUTURE USE.

WARRANTY PERIOD – 1 YEAR PARTS AND LABOR

Where HITACHI service is not available, the purchaser must assume the responsibility and expense for the proper packing, shipping and all costs associated with the delivery to and from the closest HITACHI AUTHORIZED SERVICE CENTER. All goods returned to a HITACHI authorized service center must be shipped on a "PREPAID BASIS". To avoid any damage to the returned goods, please ensure that proper packaging procedures are followed. A short written description of the problem along with proof of warranty should accompany the product returned for repair. Only products under warranty will be returned on a no-charge basis to the customer. The customer is responsible for all transport costs if the product is no longer under warranty.

WARRANTY DOES NOT COVER:

1 Products received for repair without sales or delivery receipt showing date of purchase by the original customer.

2 Damages caused by incorrect use, carelessness, unauthorized alterations, improper storage or unauthorized repair or service.

3 Damage caused by fire, flood, lightning, acts of God, or other events beyond the control of Hitachi.

4 Products purchased and/or used outside Canada.

5 In transit damage claims, improper handling by carrier or post offices.

6 Products or parts thereof which have had serial numbers removed, altered or defaced.

7 Products used for commercial purposes or institutions.

8 Products used for rental.

9 Original installation (set-up), external adjustment and all normal maintenance needed such as cleaning of video head and lens pickup, or any software modification or damage.

10 Products sold in Canada by any other organization which is not authorized by Hitachi Canada Ltd.

11 The replacement of video camera pickup element if the pick up element has been over-exposed to an intense source of light.

12 Batteries, earphone, antennas, accessories and external parts such as cabinet and knobs.

IMPORTANT: This warranty is in lieu of all other warranties, or agreements whether expressed or implied, and no person, dealer company is authorized to change, modify, or extend its terms in any manner whatsoever.

HITACHI CANADA LTD.

CANADA ONLY
CANADA SEULEMENT
NOT VALID IN U.S.A.
NON VALIDE AUX E.U.

TERMS ET GARANTIE DES PRODUITDS HITACHI

LES PRODUITS VIDÉO sont garantis contre tout défaut de matériel et de fabrication. Toute panne attribuable à de tels défauts sera réparée sans frais pourvu que la panne se soit produite lors d'un usage normal et au cours de la période de garantie ci-dessous qui court à partir de la date d'achat initiale et que l'appareil soit apporté à un CENTRE DE SERVICE AUTORISÉ HITACHI où l'appareil sera réparé sans frais.

IMPOTANT: CONSERVER CETTE CARTE DE GARANTIE AINSI QUE LA FACTURE D'ACHAT POUR UTILISATION ULTÉRIEURE.

PÉRIODE DE GARANTIE: 1 AN PIÈCES ET MAIN-D'OEUVRE

En l'absence d'un centre de service HITACHI dans un rayon acceptable, l'acheteur doit assumer la responsabilité et les coûts pour un emballage adéquat, l'expédition ainsi que tous les coûts associés à la livraison de l'appareil au CENTRE DE SERVICE AUTORISÉ HITACHI le plus près. Toutes les dépenses encourues pour le transport ou la livraison à nos centre de service autorisé Hitachi sont aux frais de l'acheteur. Le produit doit être emballé adéquatement pour éviter les bris, tout en s'assurant d'y inclure une brève description du problème ainsi qu'une PREUVE validant la garantie. Seuls les produits encore couverts par la garantie seront retournés sans frais au consommateur.

CETTE GARANTIE NE S'APPLIQUE PAS DANS LES CAS SUIVANTS:

1 Produits reçus pour réparation sans preuve validant la garantie.

2 Dommages résultant de négligence, mauvais usage, réparation sans autorisation, entreposage inadéquat et de toute réparation effectuée par des centres de service non authorisés par Hitachi.

3 Dommages ou pertes échappant à tout contrôle de la parrt de Hitachi tel que: feu, inondation, foudre, etc.

4 Produits achetés et/ou utilisés à l'extérieur du Canada.

5 Dommages encourus suite à une mauvaise manipulation du transporteur ou de la poste.

6 Produits dont le numéro de série a été enlevé, retouché ou effacé.

7 Produits utilisés à des fins commerciales ou institutionnelles.

8 Produits utilisés pour la location.

9 Installation originale (réglage initial), réglage externe et tout entretien régulier tel que le nettoyage des têtes vidéo et de l'objectif ou toute modification ou tout dommage au logiciel.

10 Produits vendus au Canada par toute autre organisation qui n'st pas dûment autorisée par Hitachi Canada Ltd.

11 Le remplacement du tube de prise de vues si dernier a été surexposé à une source de lumière intense.

12 Batteries, écouteurs, antennes, accessoires et toute les parties externs telles que boutons et cabinet.

IMPORTANT: Cette garantie ne peut être modifiée par aucune autre garantie ou entente, écrite ou verbale. Aucune personne, mrchand ou compagnie n'est autorisé à la changer, la modifier ou à en élargir les clauses d'aucune manière.

HITACHI CANADA LTD.

IMPORTANT – PLEASE COMPLETE YOUR WARRANTY REGISTRATION CARD AND MAIL TO HITACHI
OR
REGISTER YOUR PRODUCT ON – LINE AT:
WWW.HITACHI.CA

IMPORTANT – VEUILLEZ REMPIR VOTRE CARTE DE GARANTIE ET LA POSTER À HITACHI
OU
ENREGISTREZ VOTRE PRODUIT
EN – LIGNE À: WWW. HITACHI.CA

HITACHI

"In order to allow Hitachi to better serve customers' needs, please complete this card and return to Hitachi Canada Ltd. Completion of this card is not required in order to validate your Hitachi limited warranty, but would assist us in developing better services and programs for our customers." (Please print or type)

"Afin de permettre à Hitachi de mieux répondre aux besoins de la clientèl, e veuillez remplir cette carte et la retourner à Hitachi Canada Ltd. Il n'est pas nécessaire de remplir cette carte pour valider vorte garantie limitée Hitachi, toutefois, elle nous aide à améliorer les services et programmes offerts à nos clients. (En caractères d'imprimerie S.V.P)"

Model No./ N° de modèle | Serial No. / N° de série | Date of purchase / Date d'achat

Customer's first and last name / Prénom et nom du client

Customer's address - PO Box No. / Adresse ou casier postal du client

City / Ville | Province | Postal Code / Code postal

Telephone No. / N° de téléphone

Dealer's name / Nom du marchand | Dealer's address / Adresse du marchand

City / Ville | Province | Postal Code / Code postal

What are the two most important factors that influenced your purchase decision?
Quels sont les deux facteurs les plus importants qui ont influencés votre décision d'achat?

How did you hear about this VIDEO PRODUCT?
Comment avaiz-vous pris connaissance de ce PRODUIT VIDÉO?

What other VIDEO PRODUCT brands did you consider before selecting Hitachi?
Quelle autre marque de PRODUCT VIDÉO avez-vous envisagé d'acquérir a vant d'opter pour Hitachi?

HITACHI

VIDEO PRODUCT
YOUR WARRANTY

PRODUIT VIDEO
VOTRE GARANTIE

FOR SERVICE CONTACT
1-800-HITACHI
1-800-448-2244

POUR OBTENIR CE SERVICE VEUILLEZ COMPOSER LE
1-800-HITACHI
1-800-448-2244

HITACHI HITACHI

HITACHI CANADA LTD.
DIGITAL MEDIA DIVISION
2495 Meadowpine Blvd., Mississauga, Ontario L5N 6C3 CANADA

IMPORTANT NOTICE: This warranty will not apply to product purchased outside Canada OR sold by any organization other than HITACHI CANADA LTD.
AVIS IMPORTANT: Notre garantie ne couvre pas les produits achetés à l'extérieur du Canada OU vendus par toute organisation autre que HITACHI CANADA LTD.

Register your product on-line at Hitachi.ca or mail to the address on this card.

Enregistrez votre produit en ligne à Hitachi.ca ou par la poste à l'adresse indiquée sur cette car te.

ATT: WARRANTY DEPARTMENT
HITACHI CANADA LTD.
2495 MEADOWPINE Blvd.,
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